

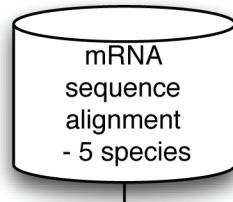
Supplementary Figure 1. Changes in mRNA expression across 70 microRNA transfection experiments in HeLa cells. Data from GEO database, GSM numbers in Supplementary Table 2 and references in Table 1 (main paper).

a. genes which go down by 4 standard deviations or more in at least one experiment

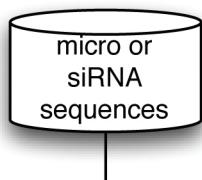
b. genes which go up by at 4 standard deviations or more in at least one experiment.

Supplementary Figure 2. Analysis pipeline

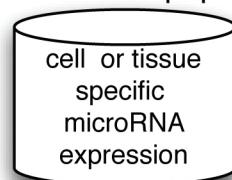
UCSC browser



RFAM



Data from Landgraff et al.,
or individual papers



mi- or siRNA target
prediction
(6-mers, 7-mers,
miRanda)

GEO or Array Express

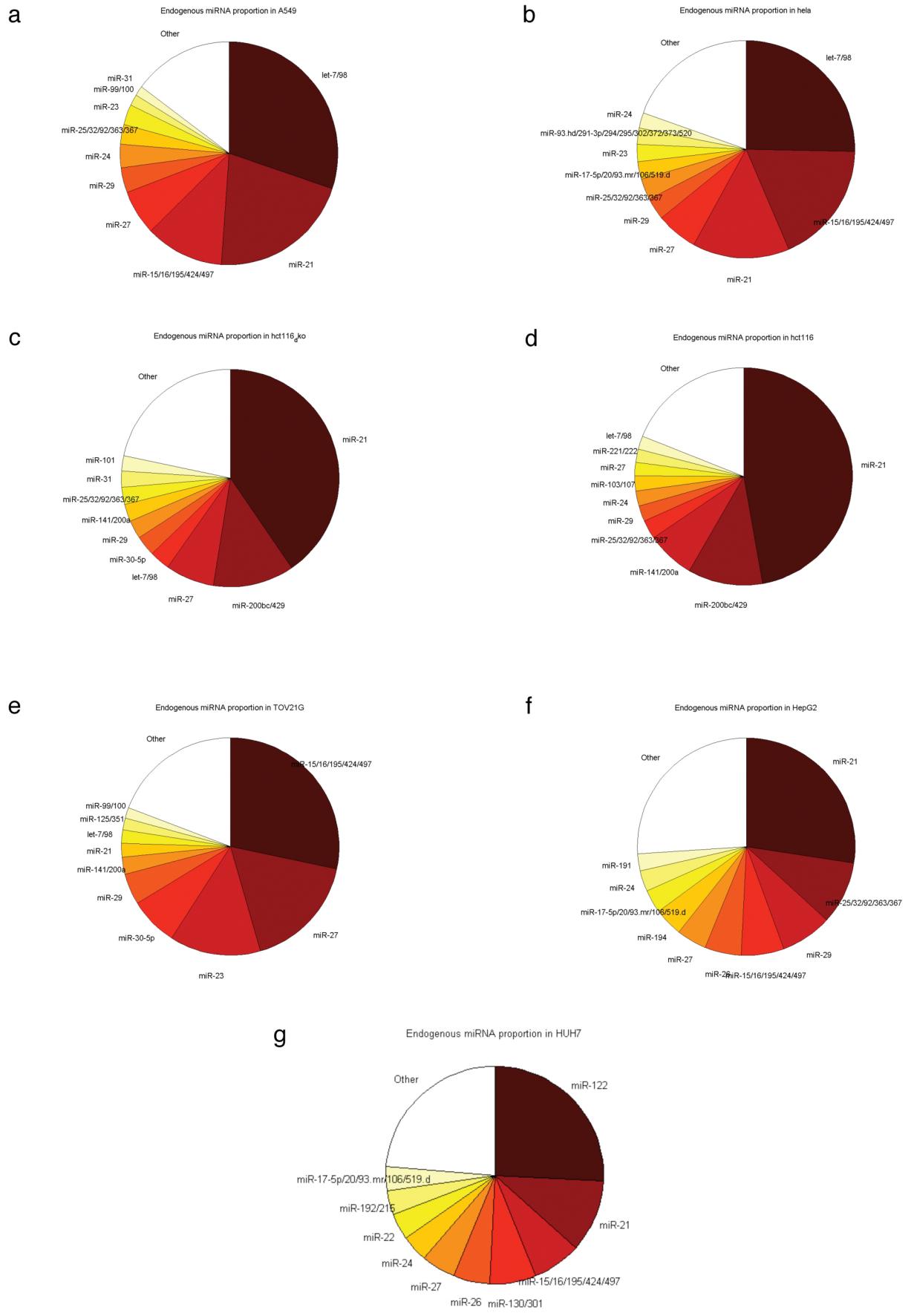
mRNA or protein
expression
changes after si/miRNA
transfections or inhibition

Determine sets X, D & B

K-S statistics

Supplementary Figure 2. Pipeline for analysis. Data sources shown above description.

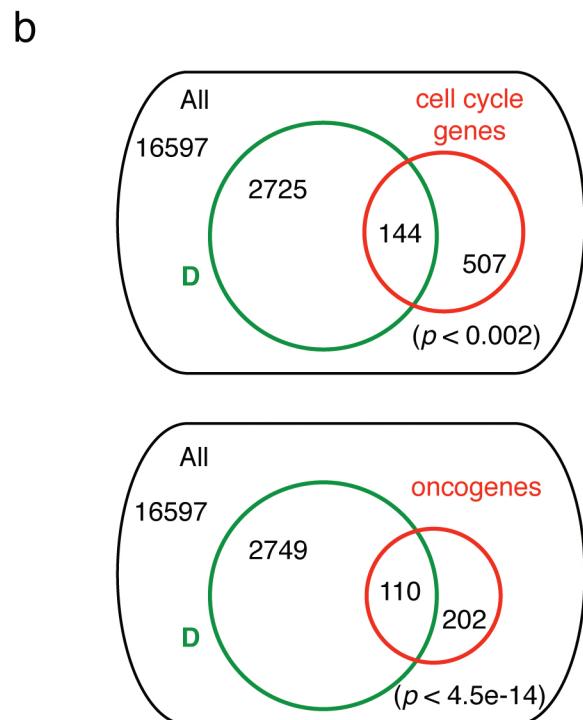
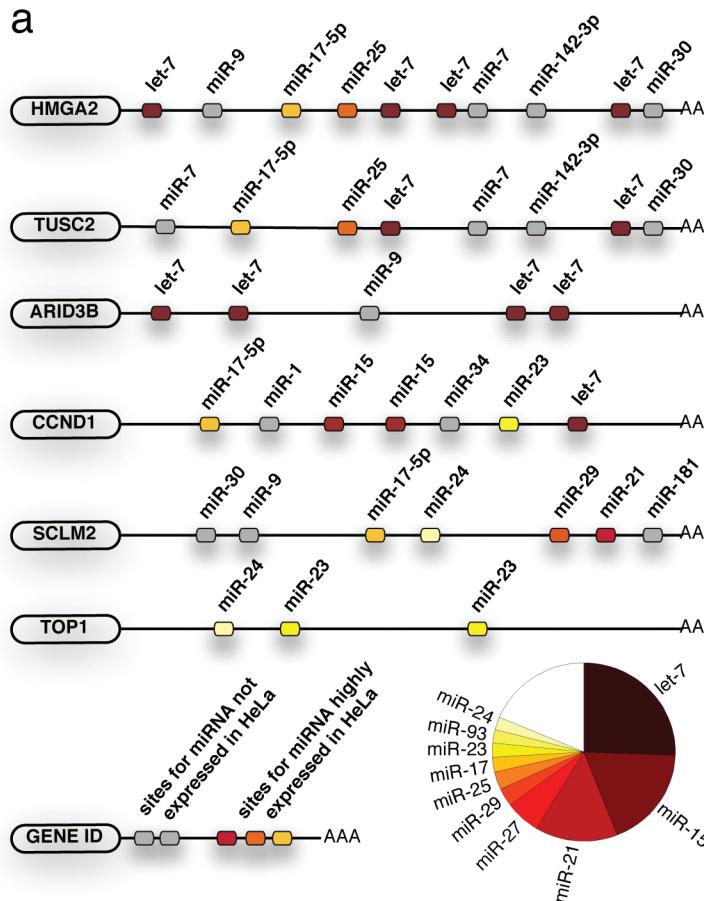
Supplementary Figure 3. microRNA expression in 7 cell types



Supplementary Figure 3. Top 10 expressed families of microRNA genes in each cell type analyzed represented as pie charts. Normalized as described in Methods a. A549 cells [1] b. HeLa [2] c. HCT116 Dicer-/ [3]d. HCT116 [3]e. TOV21G [1] f. HepG2 [4] g. Huh [2]

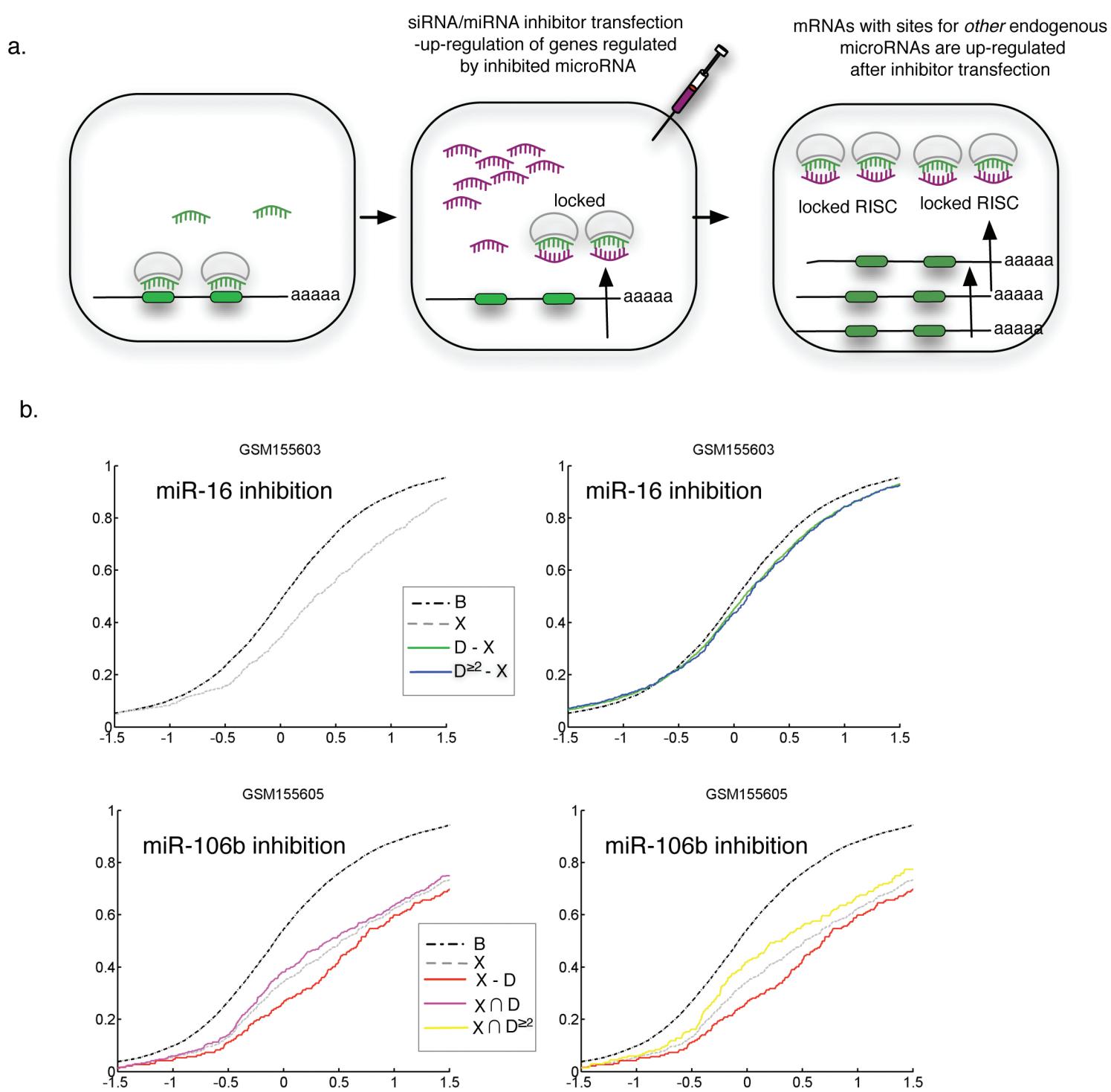
1. He, L., et al., A microRNA component of the p53 tumour suppressor network. *Nature*, 2007. 447(7148): p. 1130-4.
2. Landgraf, P., et al., A mammalian microRNA expression atlas based on small RNA library sequencing. *Cell*, 2007. 129(7): p. 1401-14.
3. Cummins, J.M., et al., The colorectal microRNAome. *Proc Natl Acad Sci U S A*, 2006. 103(10): p. 3687-92.
4. Wang, X. and X. Wang, Systematic identification of microRNA functions by combining target prediction and expression profiling. *Nucleic Acids Res*, 2006. 34(5): p. 1646-52.

Supplementary Figure 5. Genes that are up-regulated after small RNA transfections are overrepresented in cell cycle genes and oncogenes



Supplementary Figure 5. Genes that are up-regulated after small RNA transfections. **a.** Examples of genes that are up-regulated in experiments when they contain sites for endogenous miRNAs and not the transfected miRNA. Colors of endogenous sites match expression profile shown (representation of relative expression of top 10 families of miRNAs in HeLa cells [22]); grey sites represent transfected miRNA sites. Only sites for endogenous or transfected miRNAs are shown. **b.** Venn diagrams showing overlap between genes with endogenous miRNA target sites in HeLa cells (D) and cell cycle genes or oncogenes; the significance of the overlap is assessed by Fisher's exact test.

Supplementary Figure 6. Other endogenous microRNAs are up-regulated after inhibition of one particular endogenous microRNA



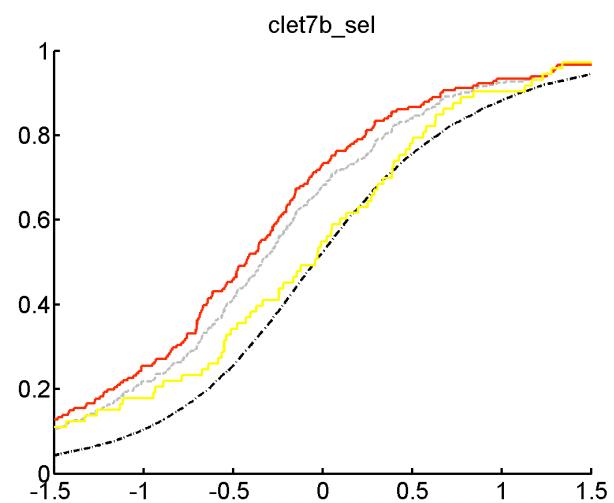
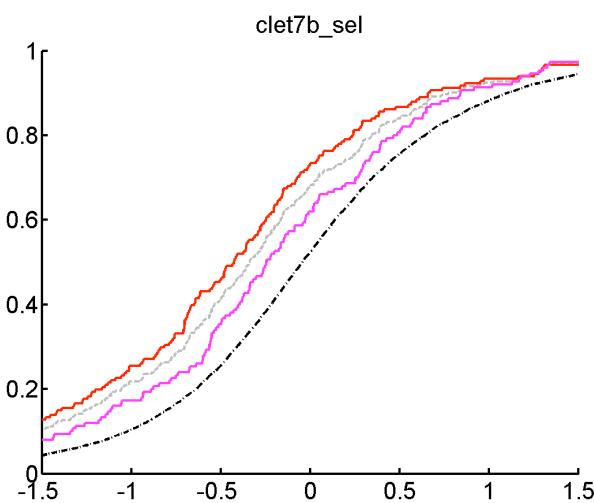
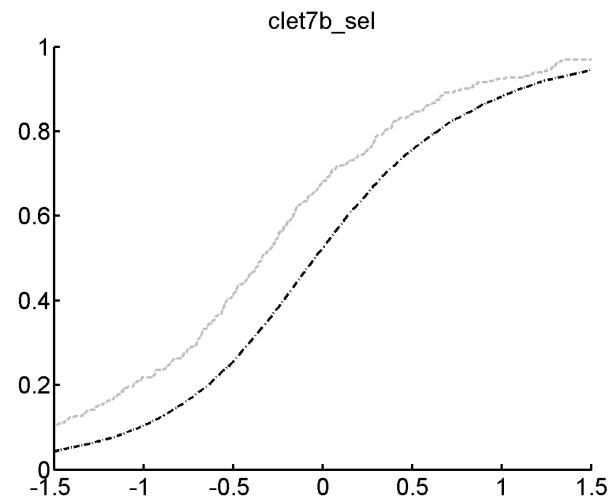
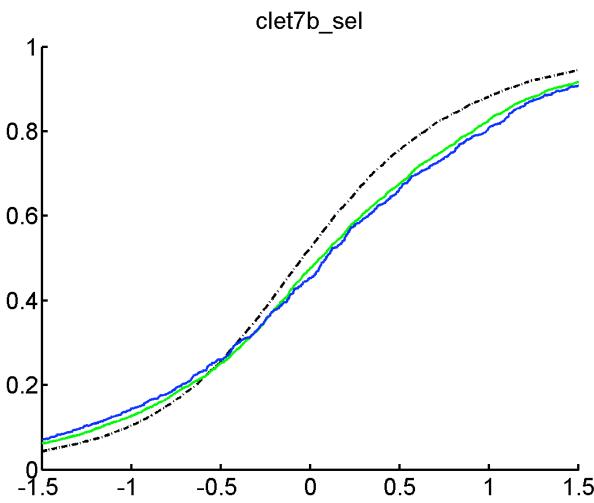
Supplementary Figure 6. Other endogenous microRNA target genes are up-regulated after inhibition of one particular endogenous microRNA. a. Schematic of hypothesis consistent with these inhibition results b. Cumulative probability distributions of gene expression changes for the inhibition of miR-16 and miR 106b [5], colors as in Supp. Figure 4.

Supplementary Figure 4. Plots of all experiments

Supplementary Figure 4. Cumulative probability distributions of gene expression changes for all experiments described in Supplementary Table 2. We include (i) ($D-X$) vs B (green vs black), ($D \geq 2-X$) vs B (blue vs black), (ii) X vs B (grey vs black), (iii) ($X-D$) versus ($X \cap D$) (red vs magenta), (iv) ($X-D$) versus ($X \cap D \geq 2$), (red vs yellow) for each of the analyzed experiments

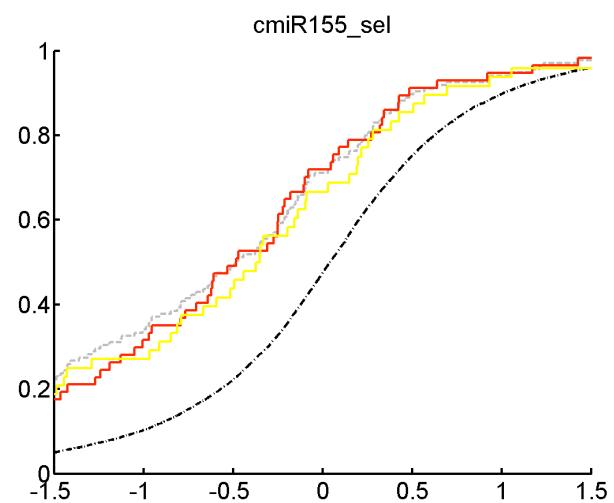
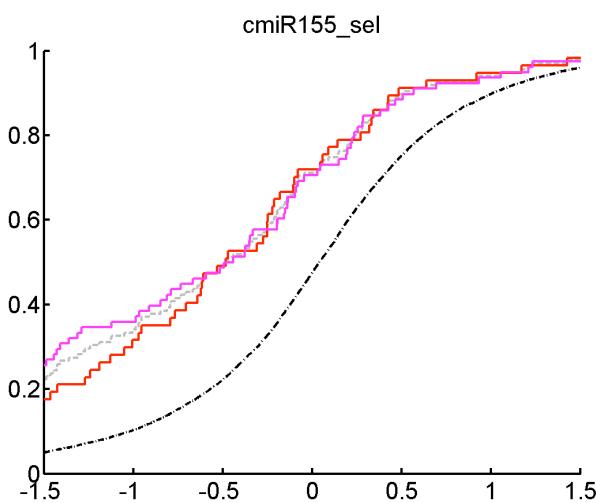
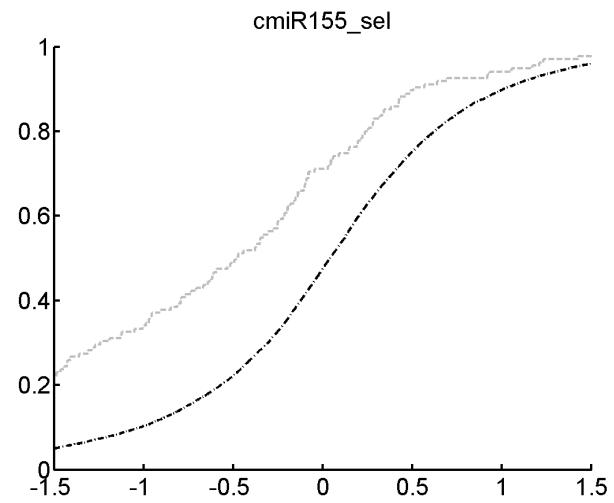
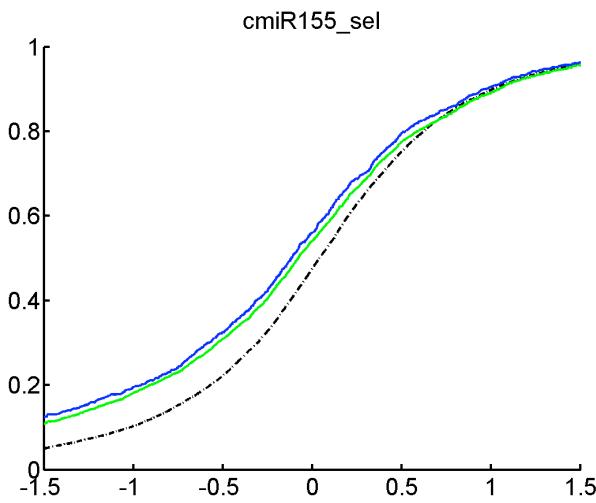
Experiment: clet7b-sel

mi/siRNA: let-7b



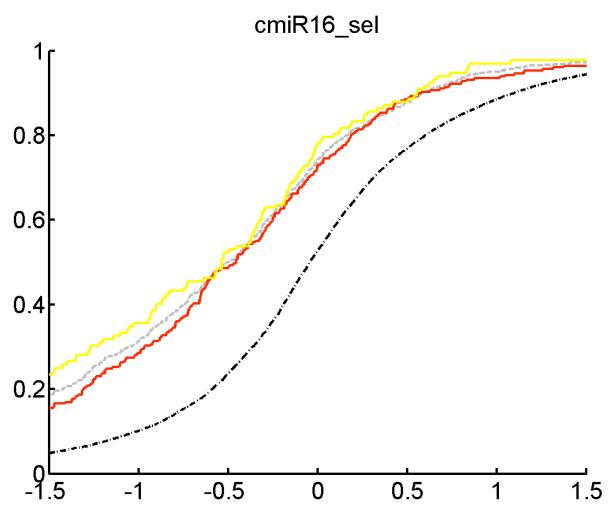
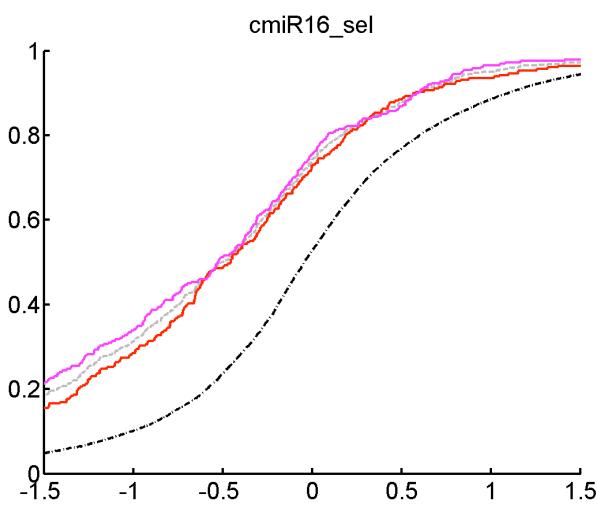
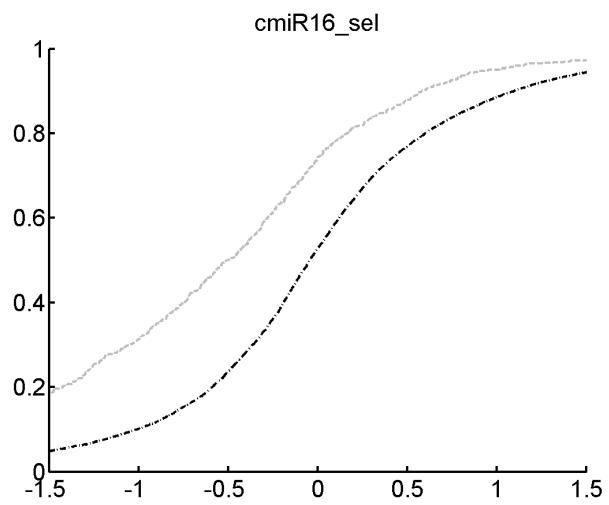
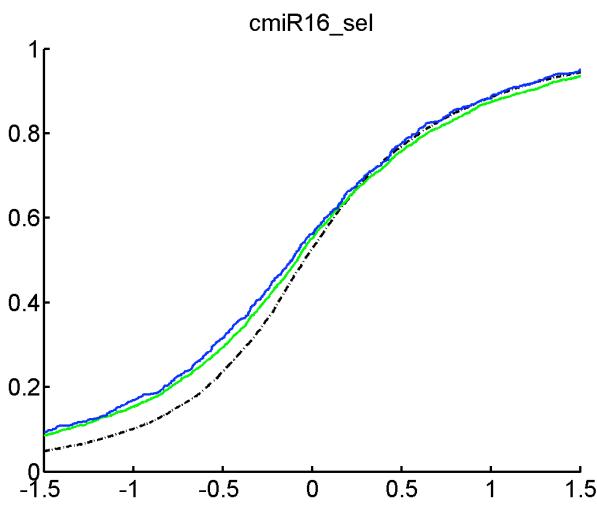
Experiment: cmiR155-sel

mi/siRNA: miR-155



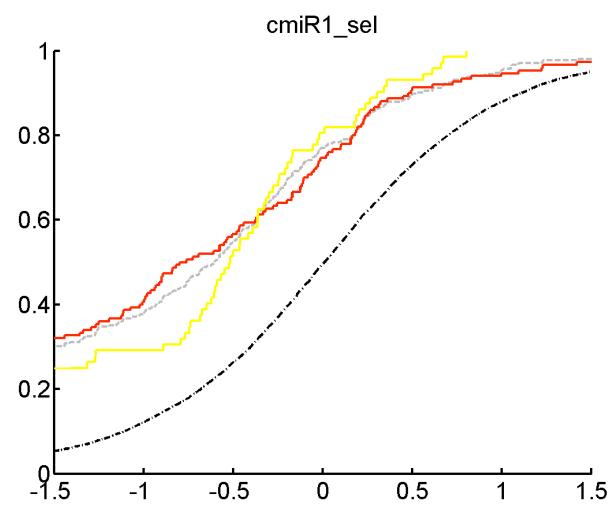
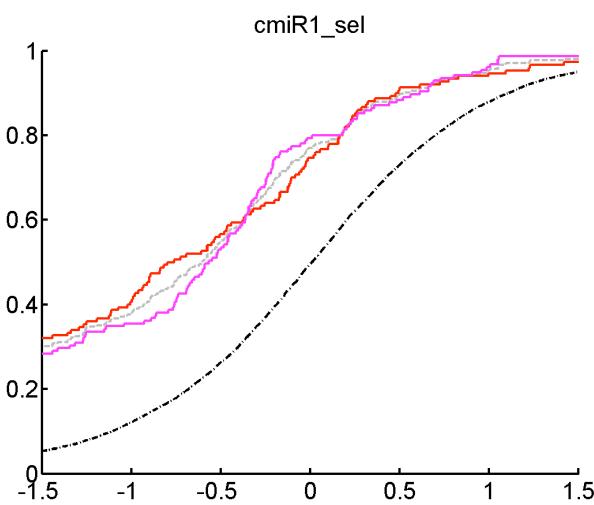
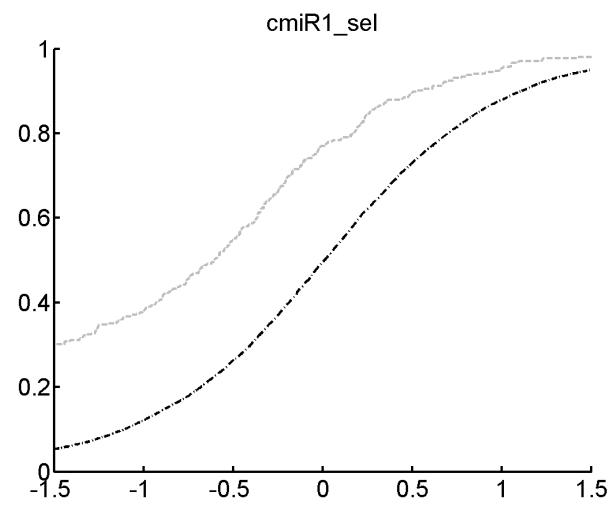
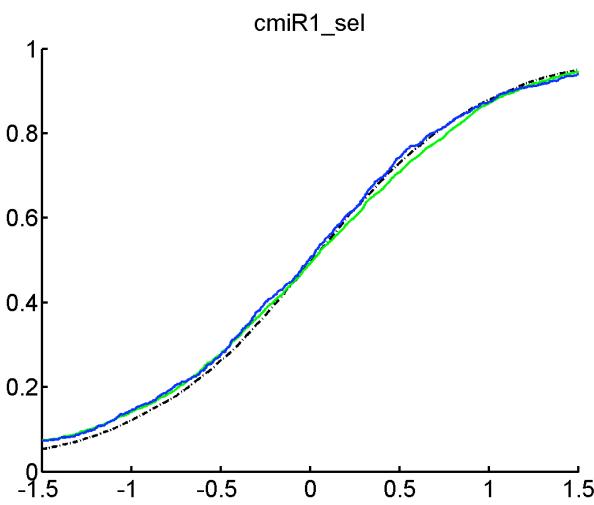
Experiment: cmiR16-sel

mi/siRNA: miR-16



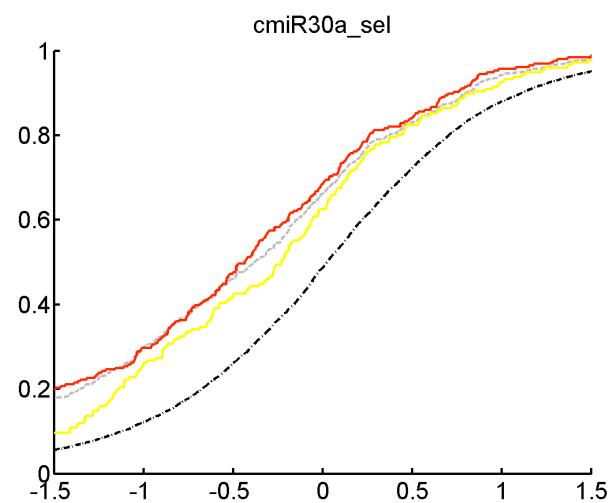
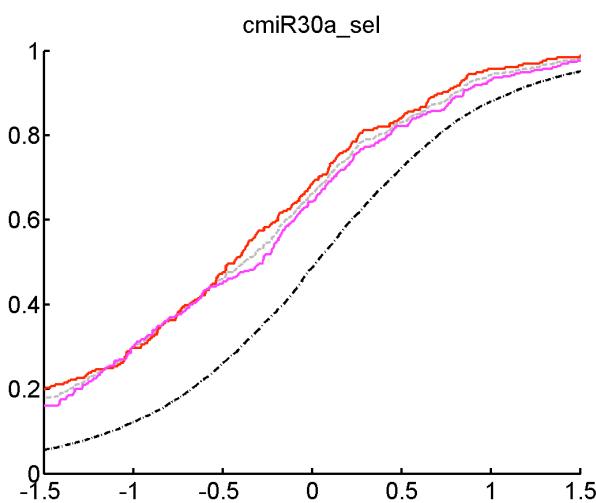
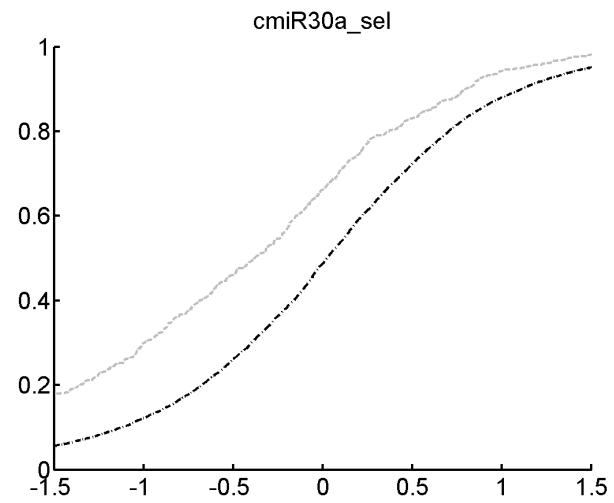
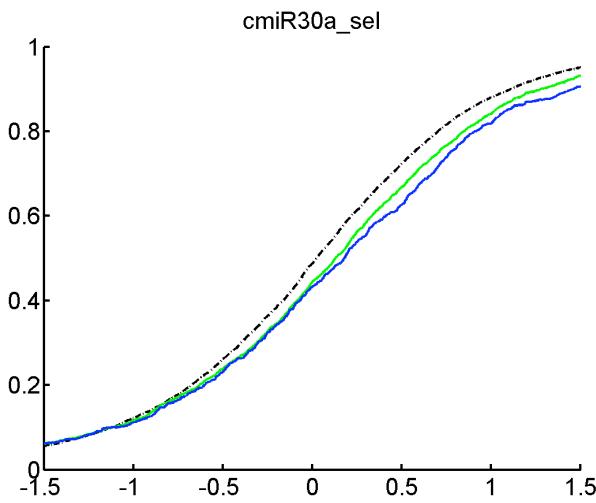
Experiment: cmiR1-sel

mi/siRNA: miR-1



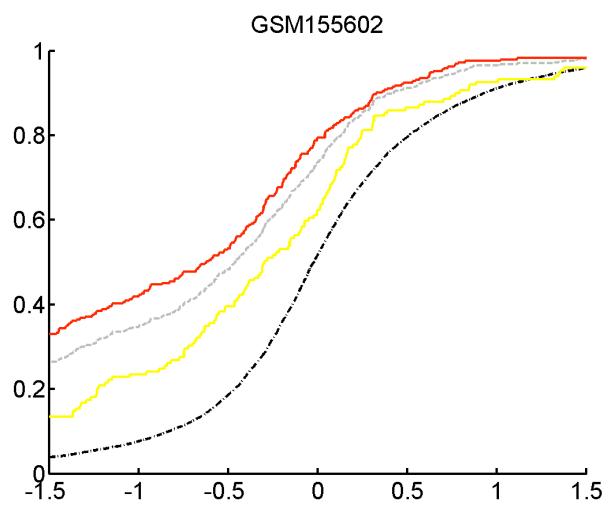
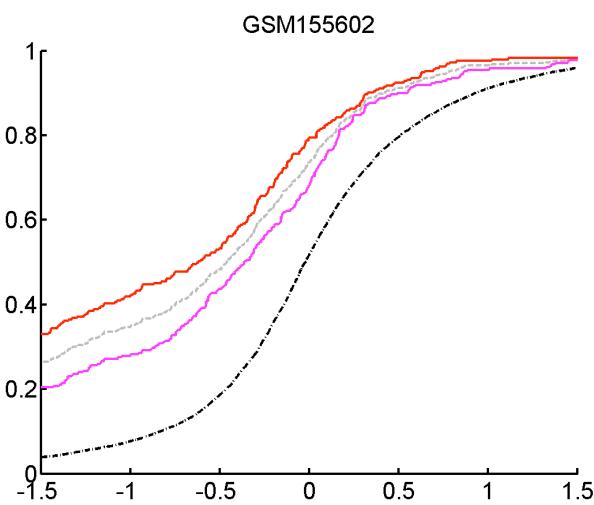
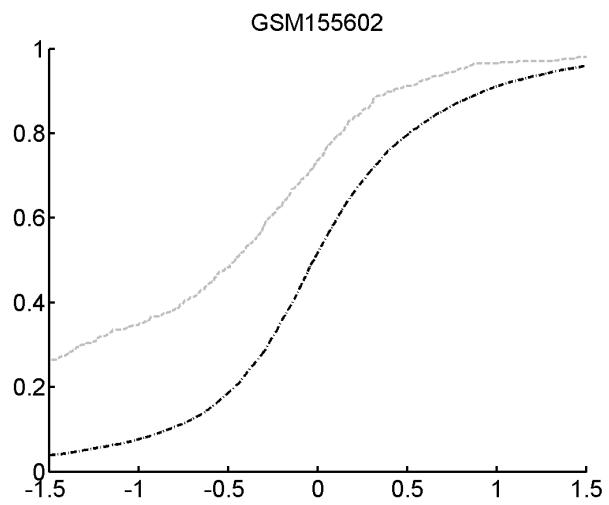
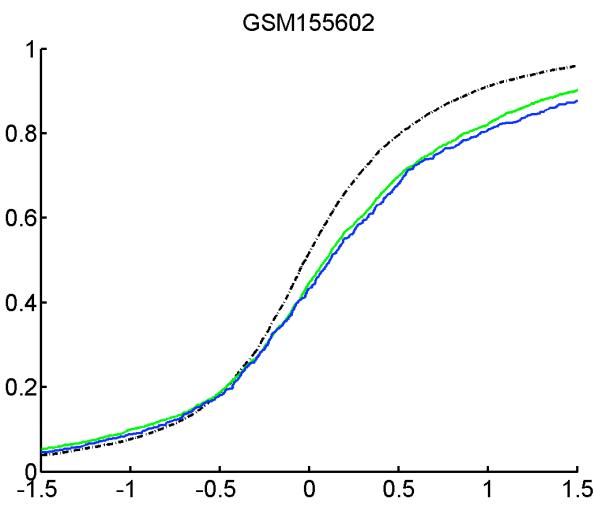
Experiment: cmiR30a-sel

mi/siRNA: miR-30a



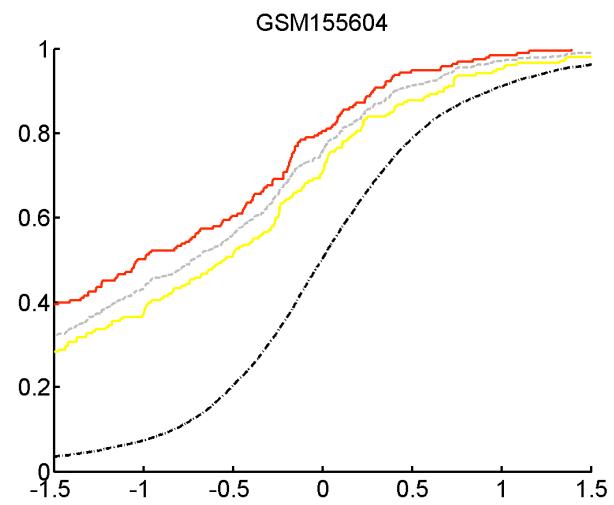
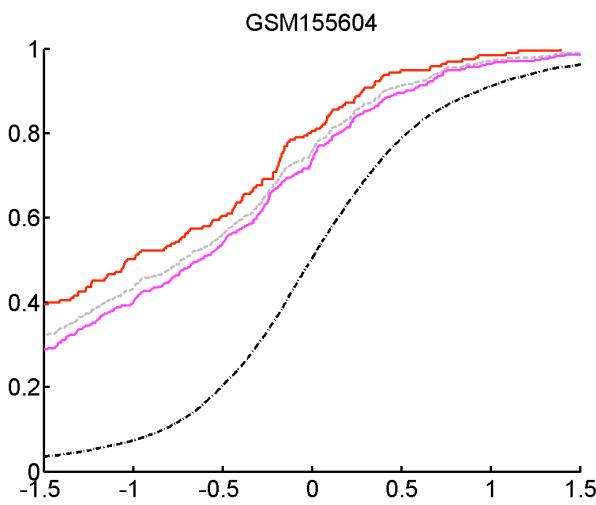
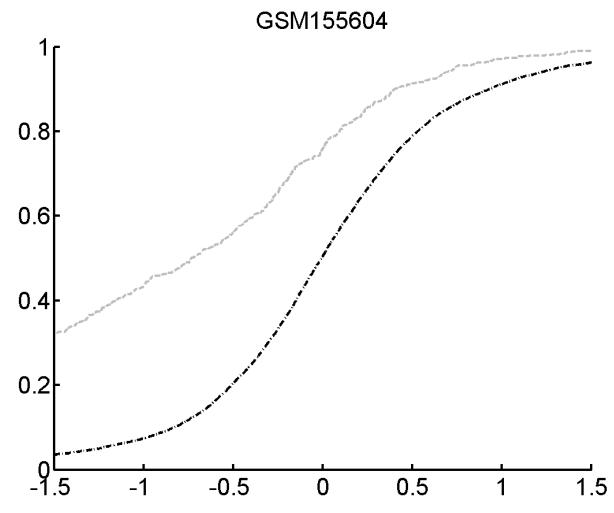
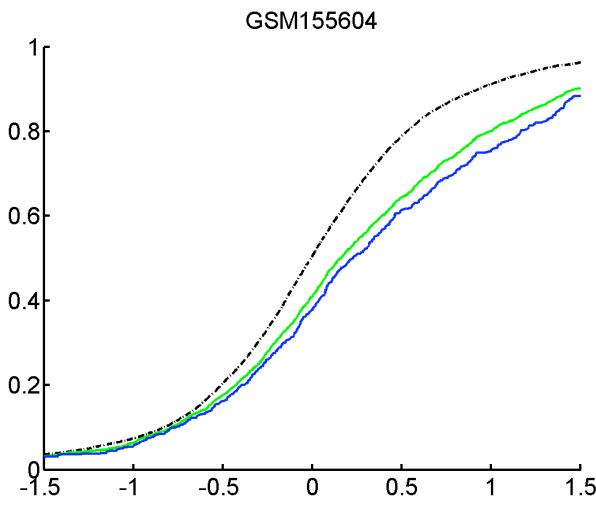
Experiment: GSM155602

mi/siRNA: miR-16



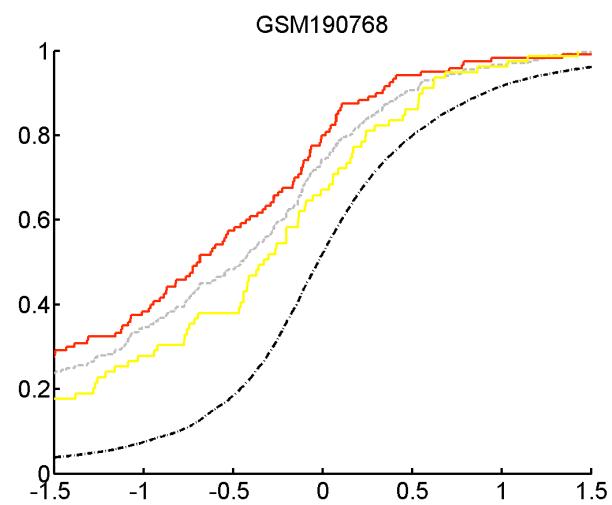
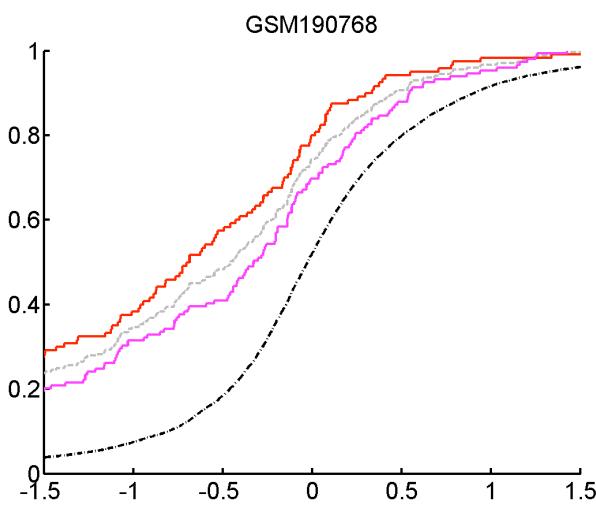
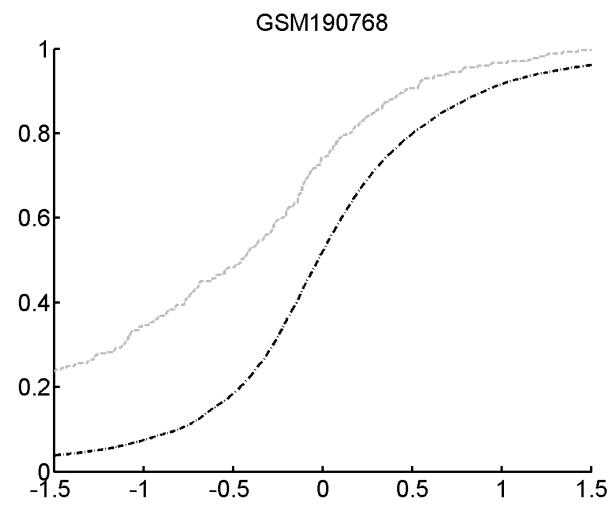
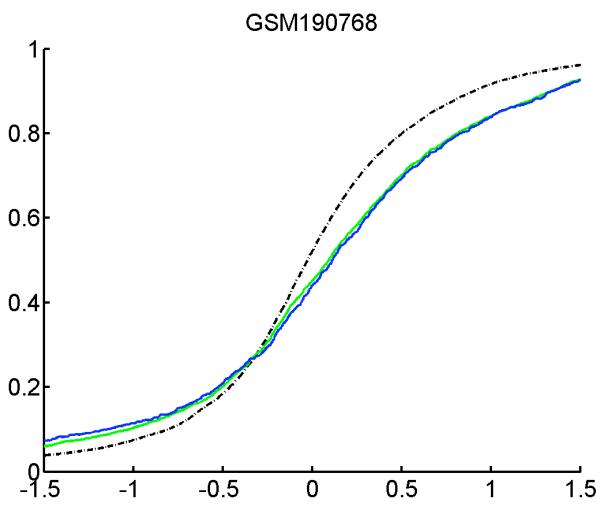
Experiment: GSM155604

mi/siRNA: miR-106b



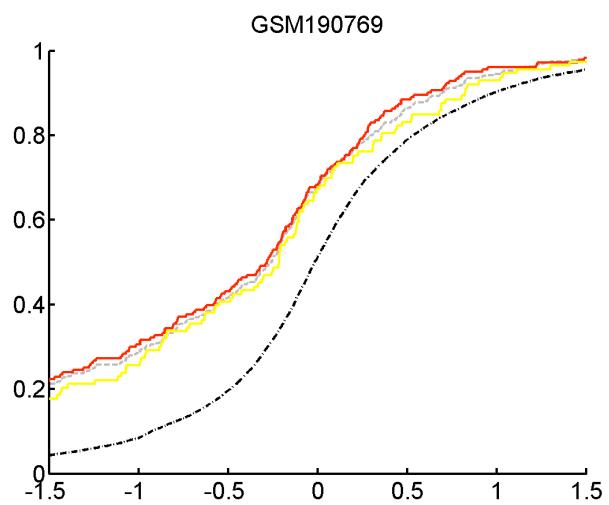
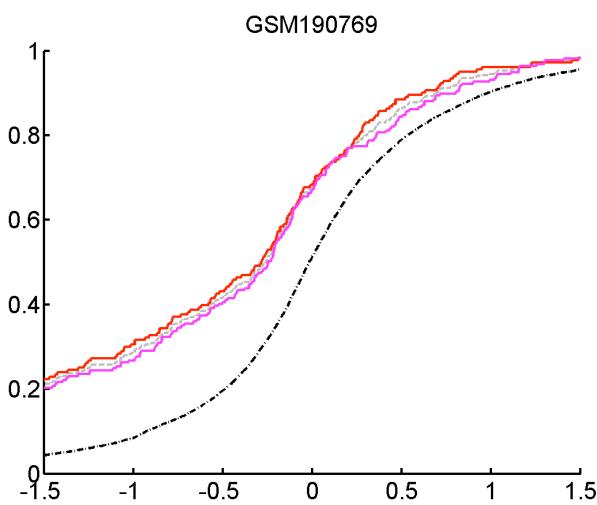
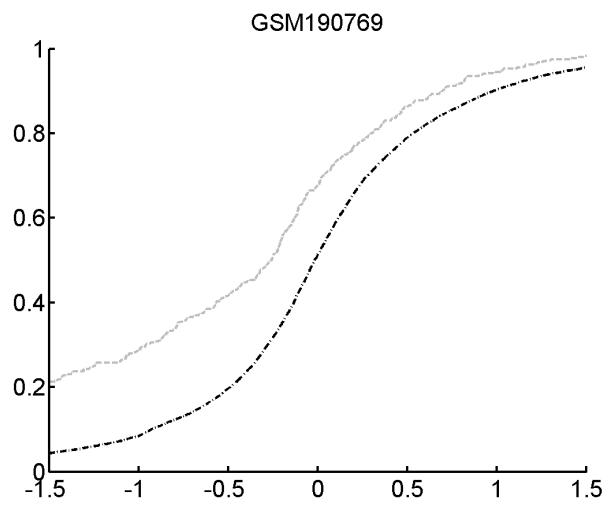
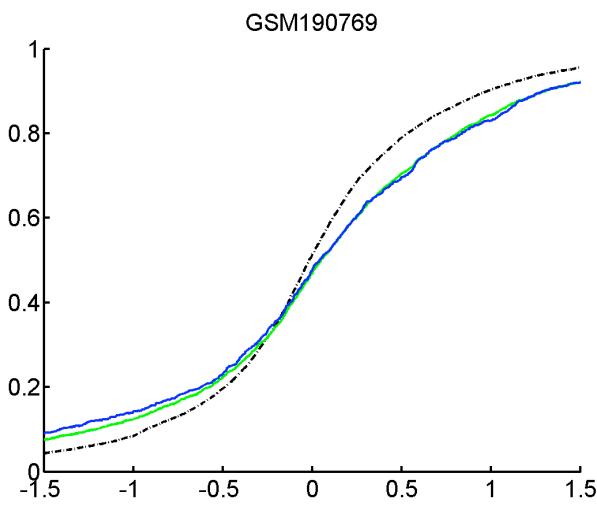
Experiment: GSM190768

mi/siRNA: mir-34a



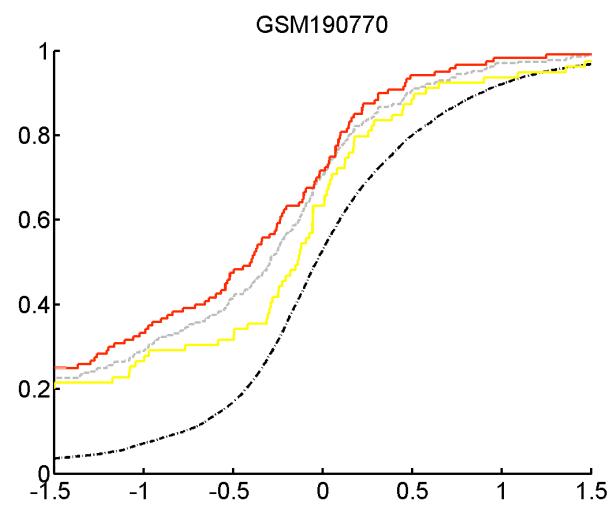
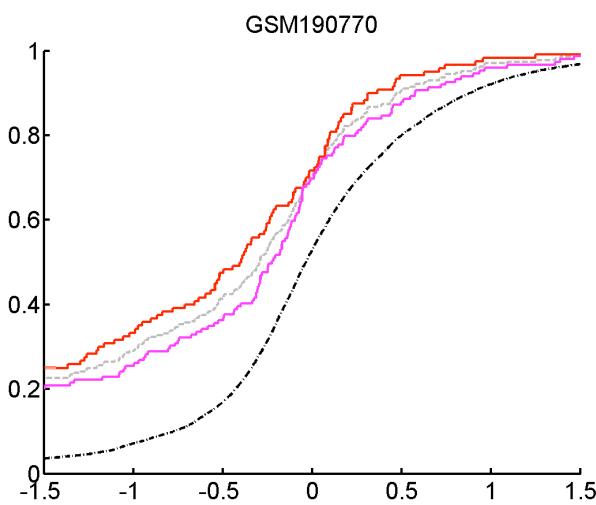
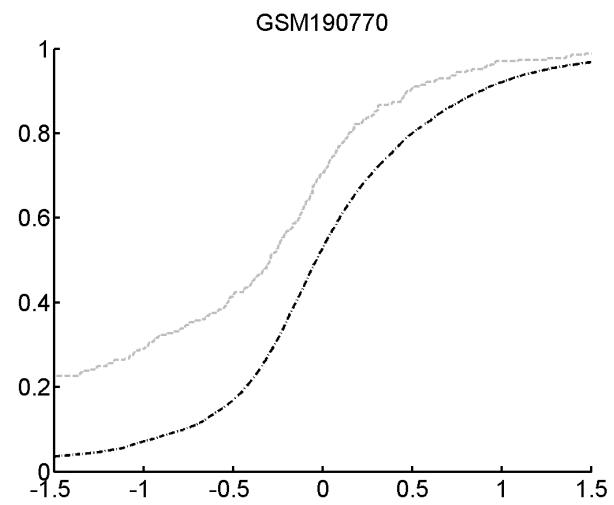
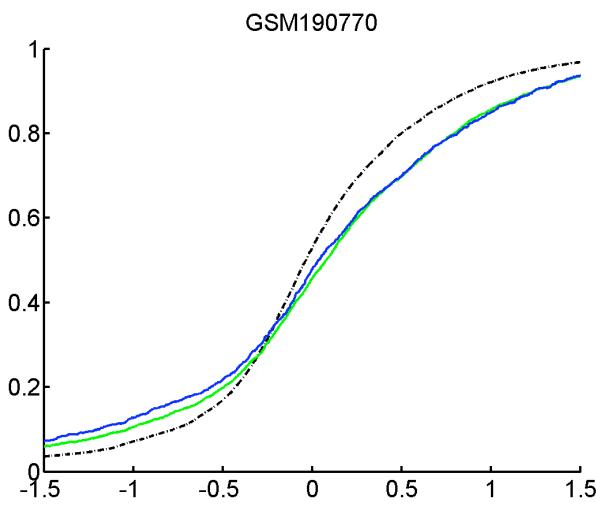
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mi/siRNA: mir-34b



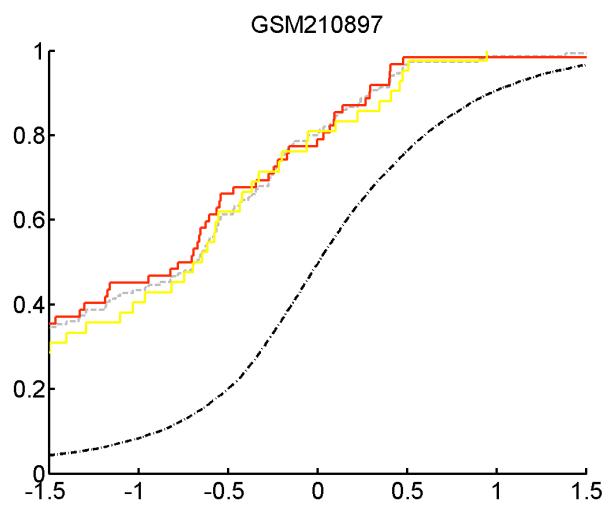
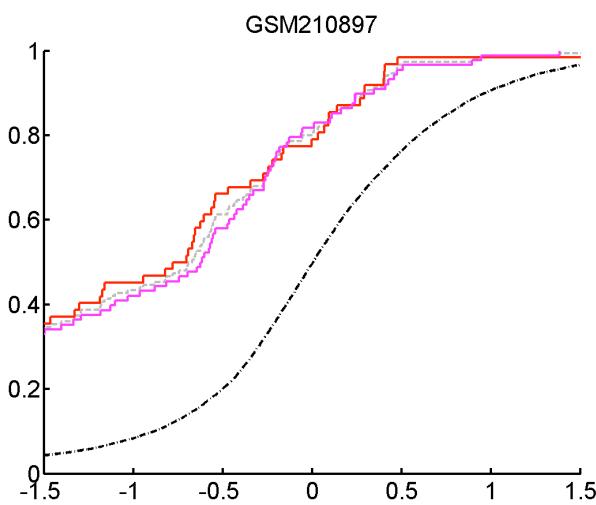
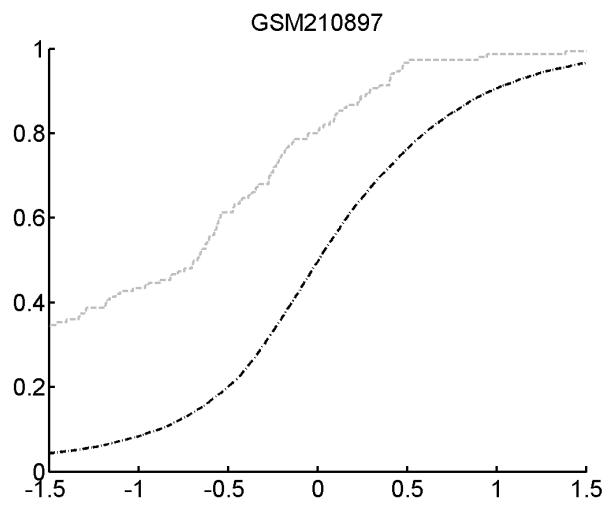
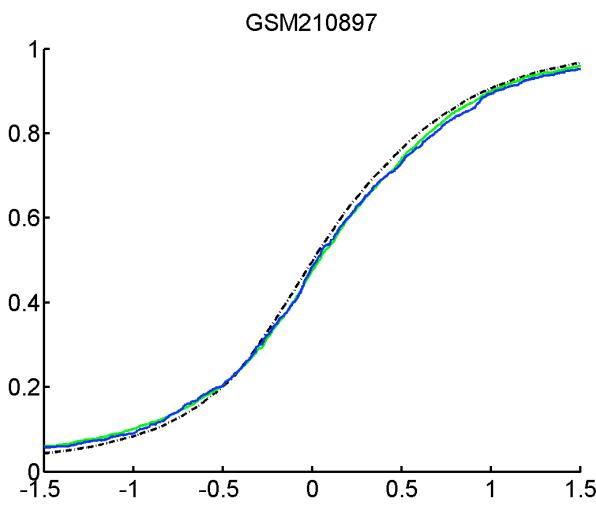
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mi/siRNA: mir-34c



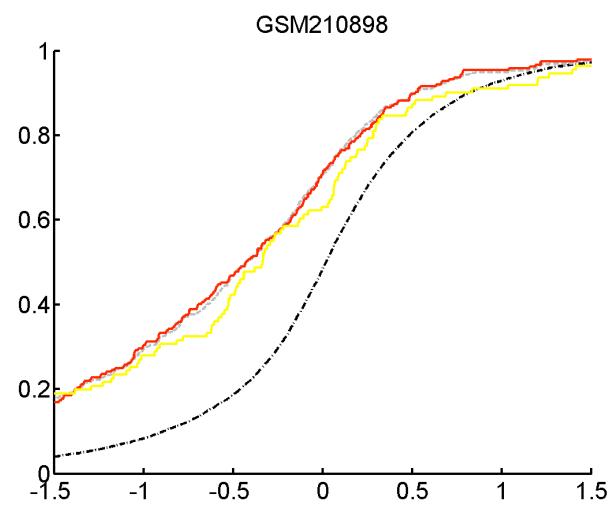
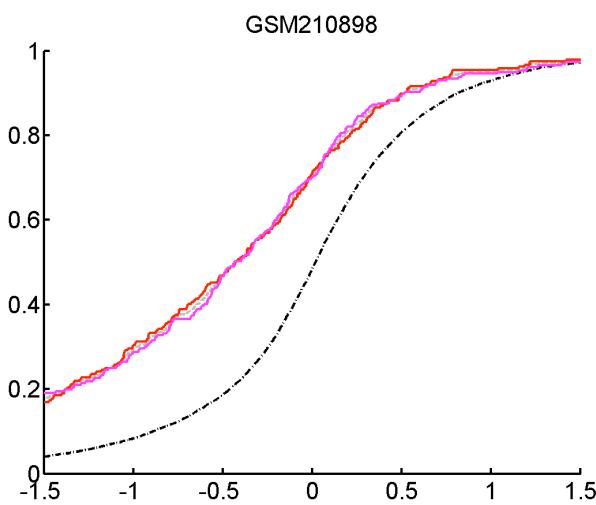
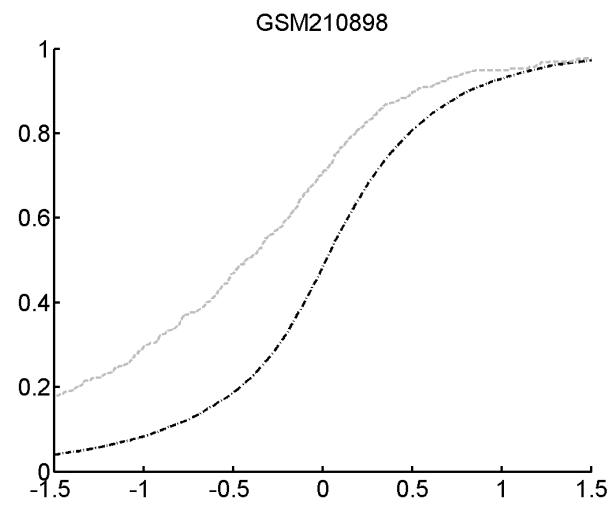
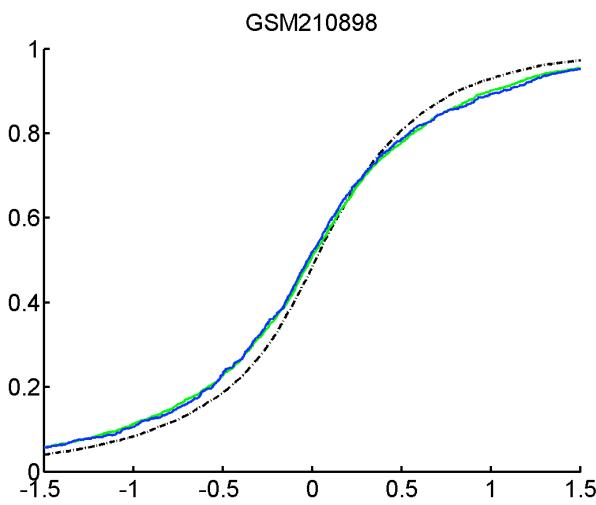
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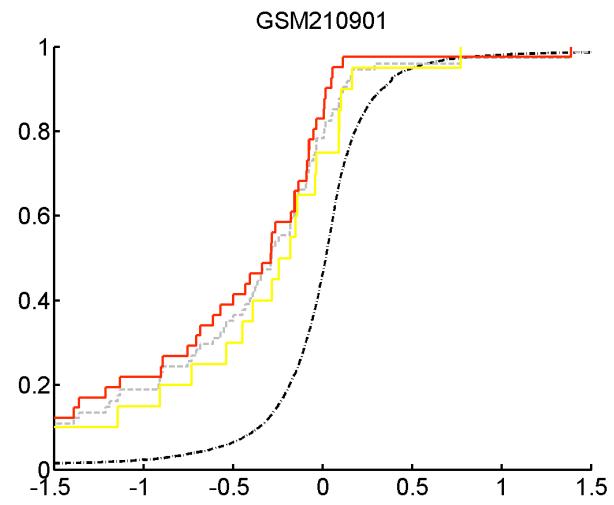
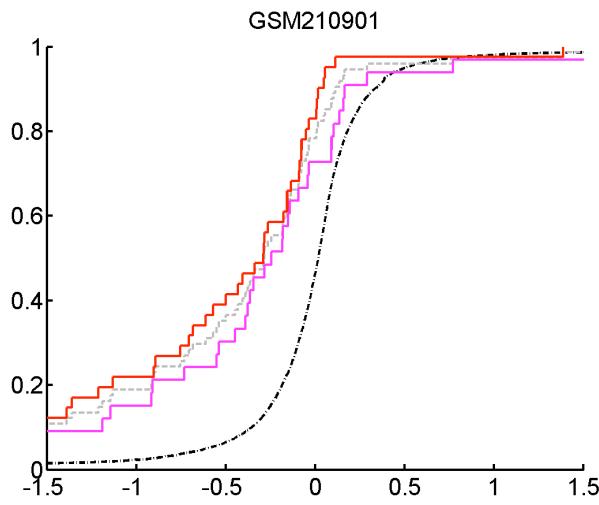
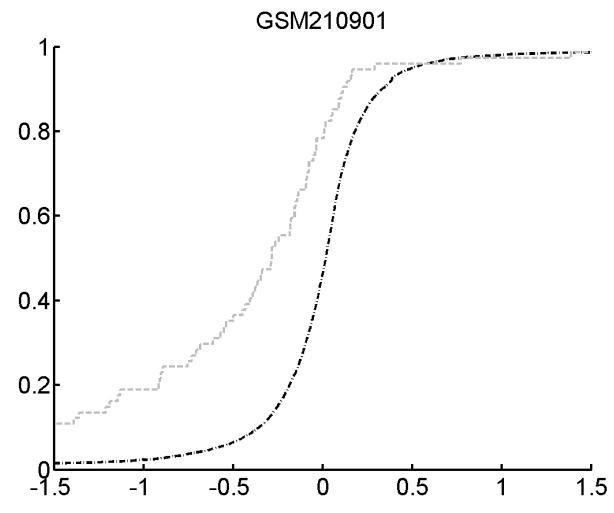
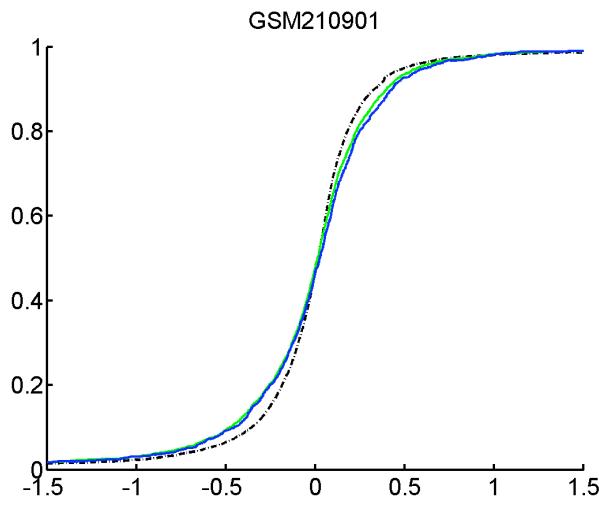
mi/siRNA: miR-7



Experiment: GSM210898

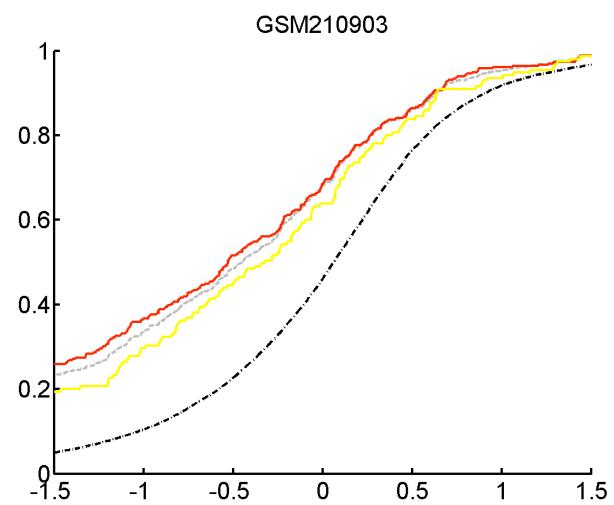
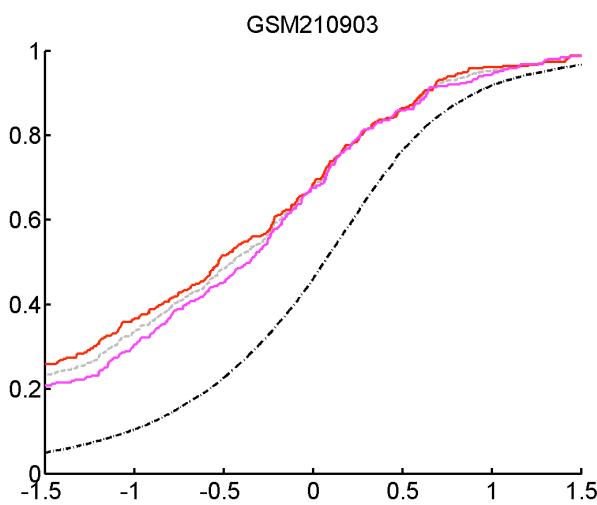
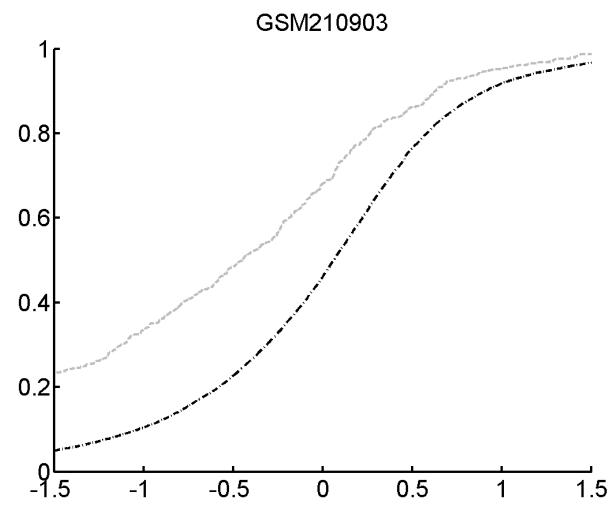
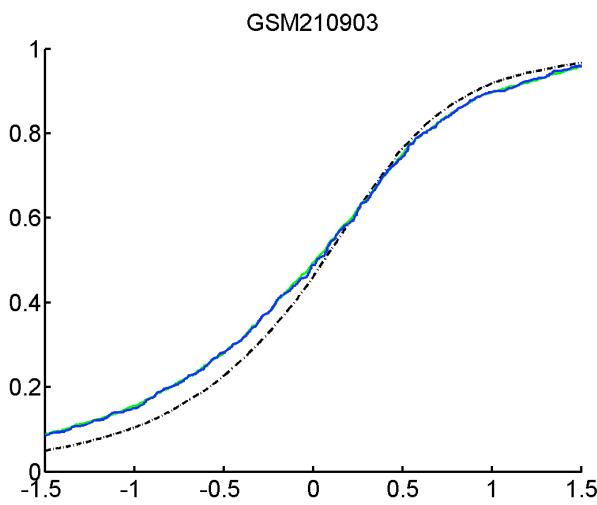
mi/siRNA: miR-9





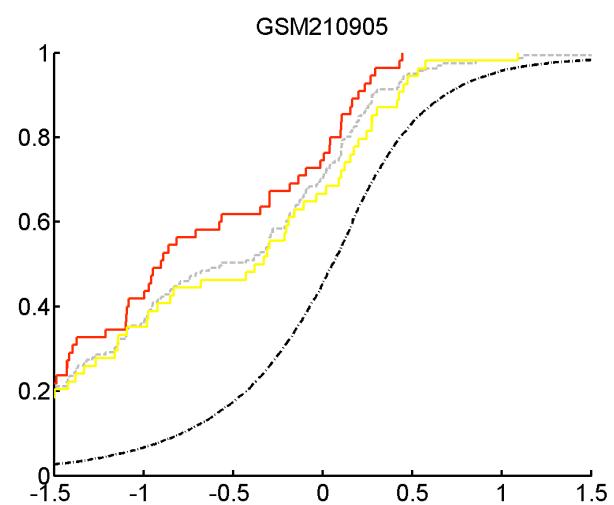
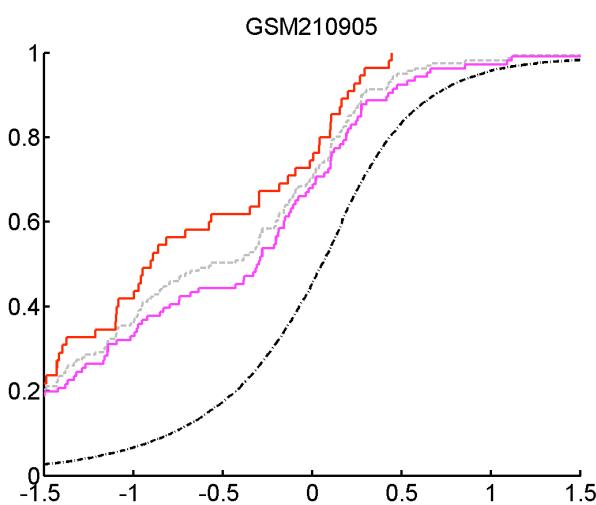
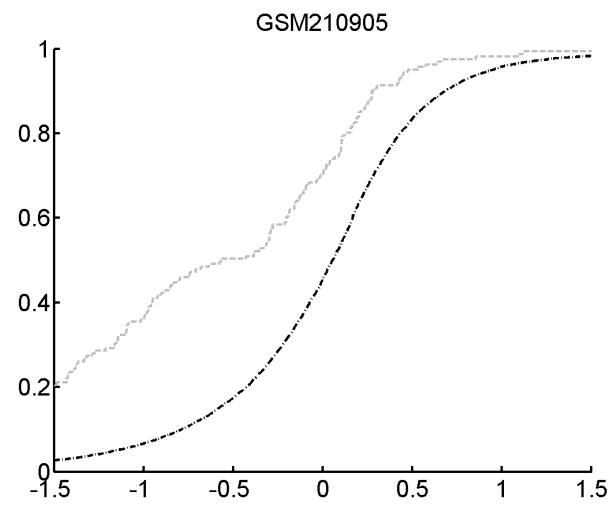
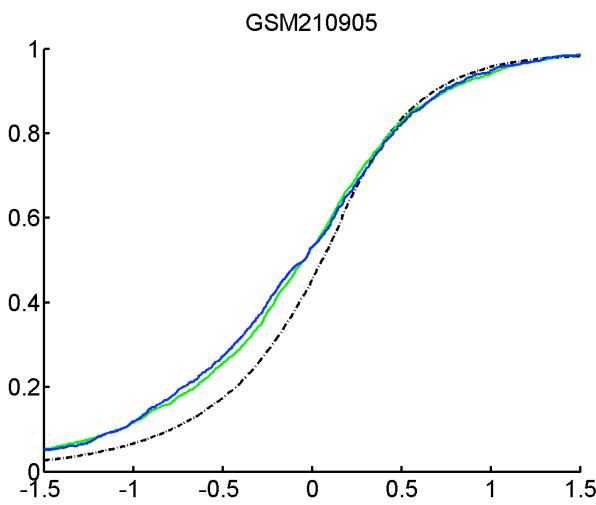
Experiment: GSM210903

mi/siRNA: miR-128a



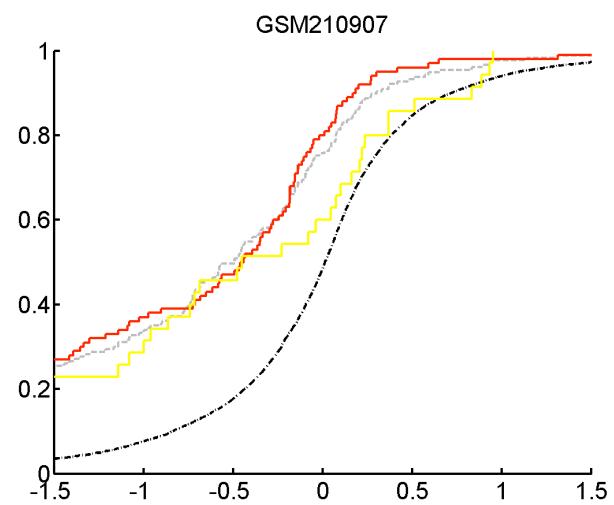
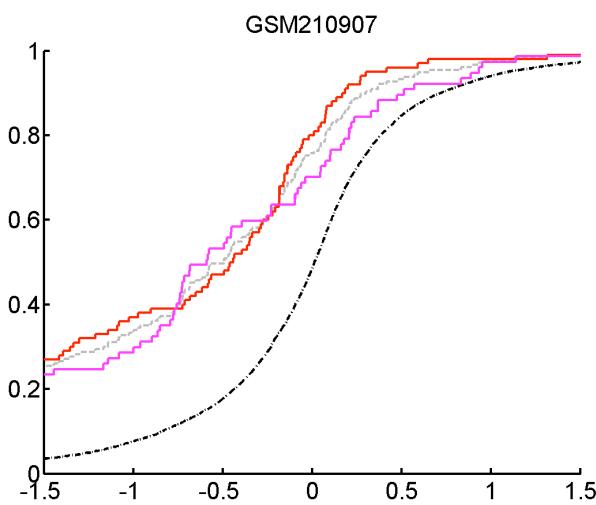
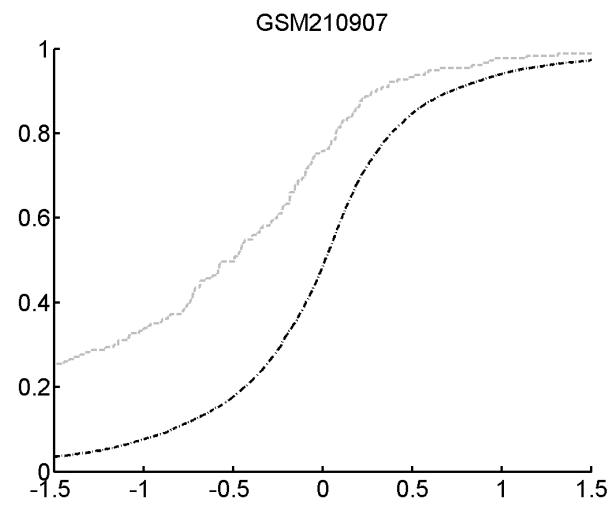
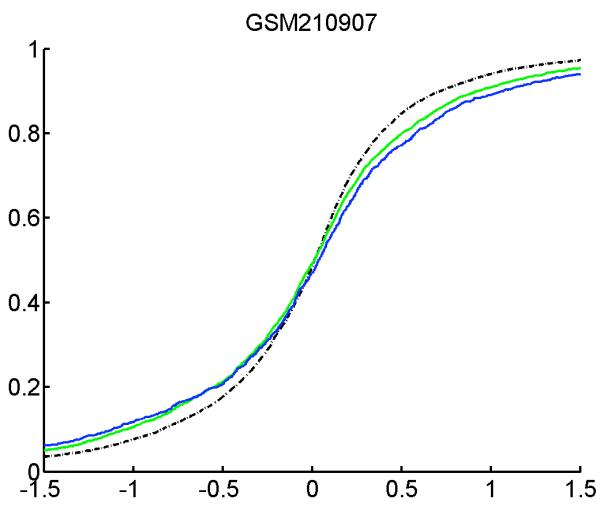
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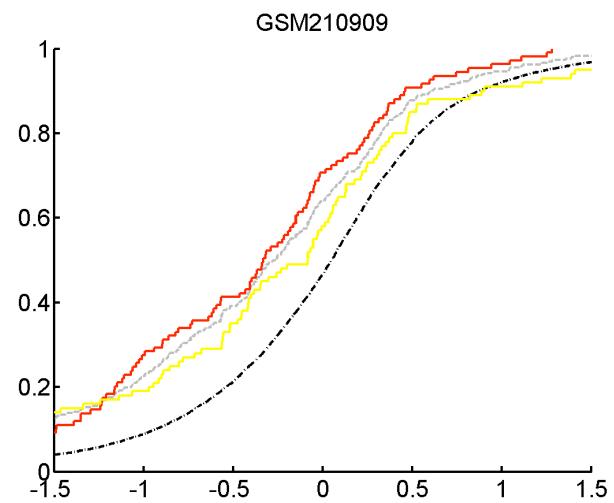
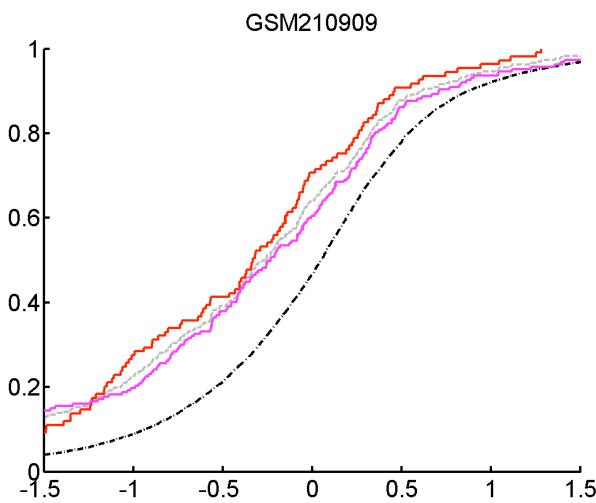
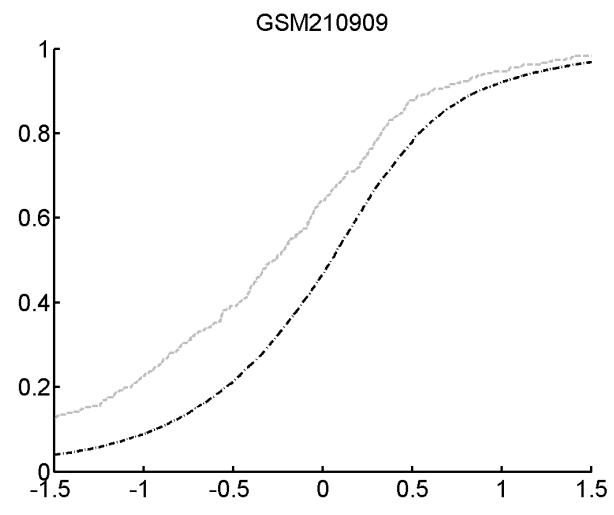
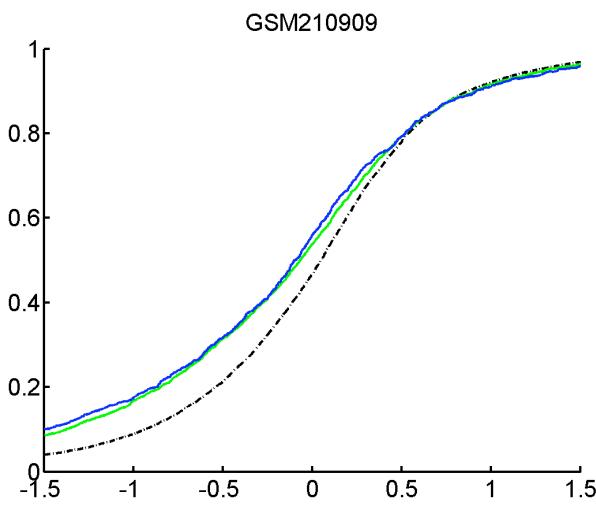
mi/siRNA: miR-132



Experiment: GSM210907

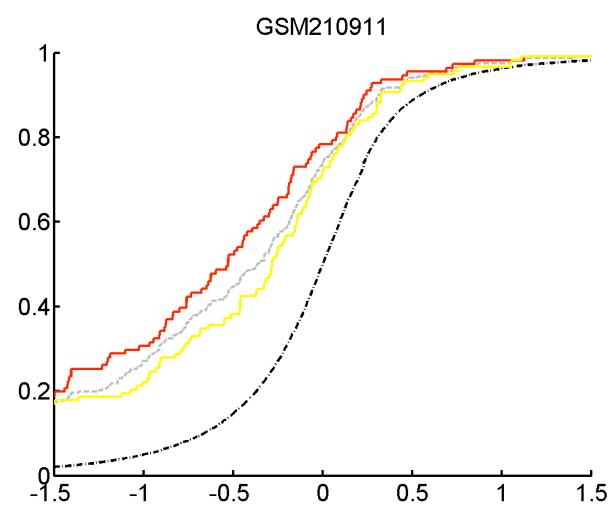
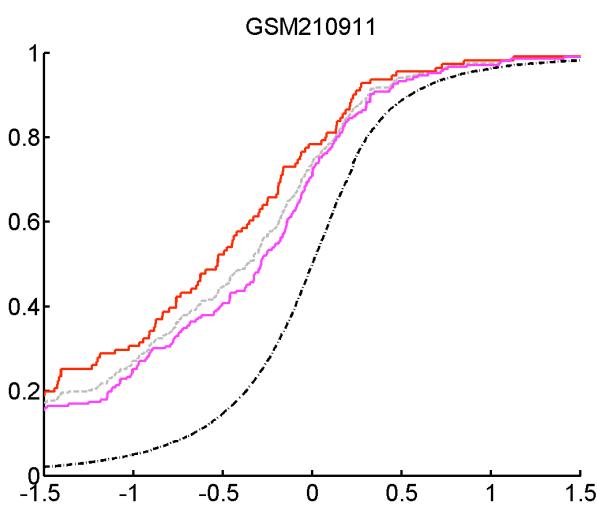
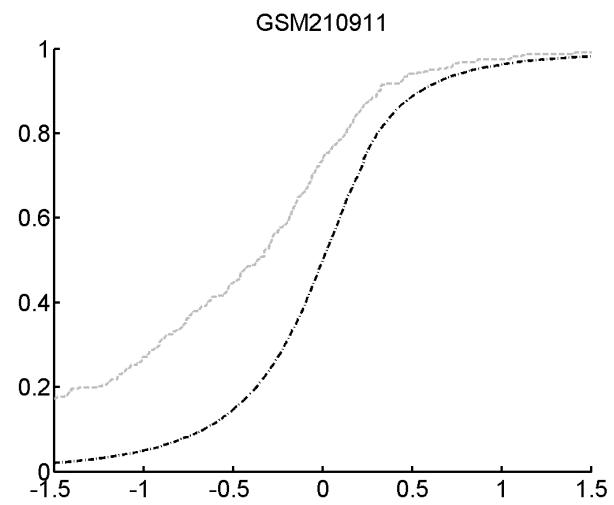
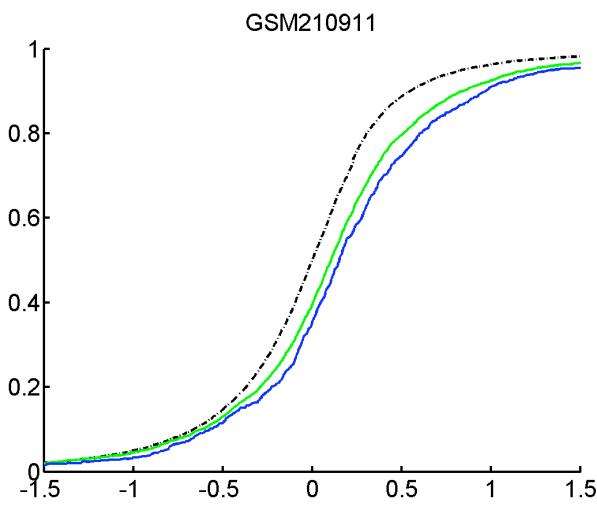
mi/siRNA: miR133a





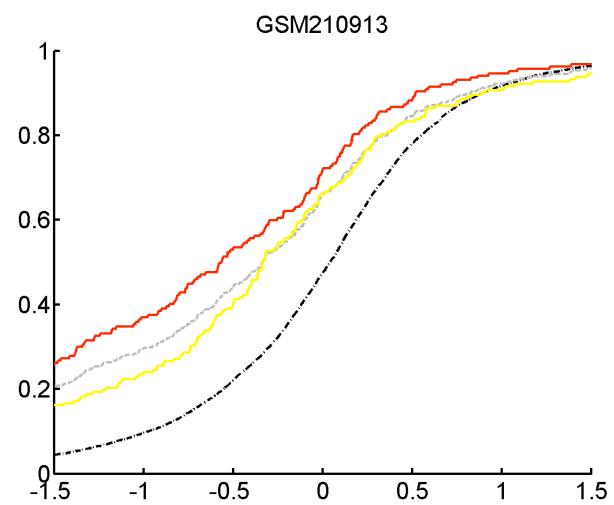
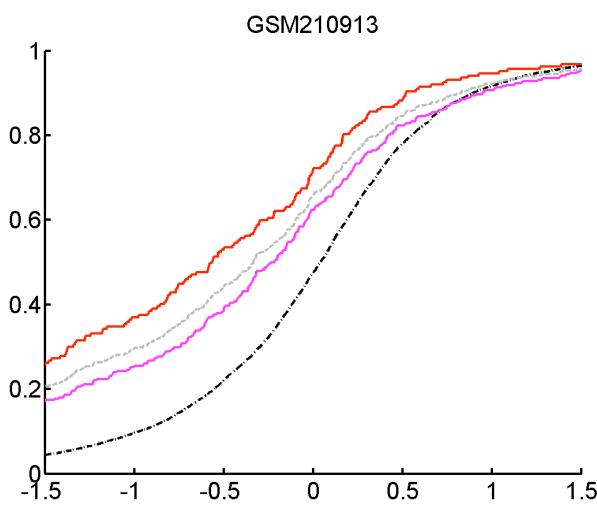
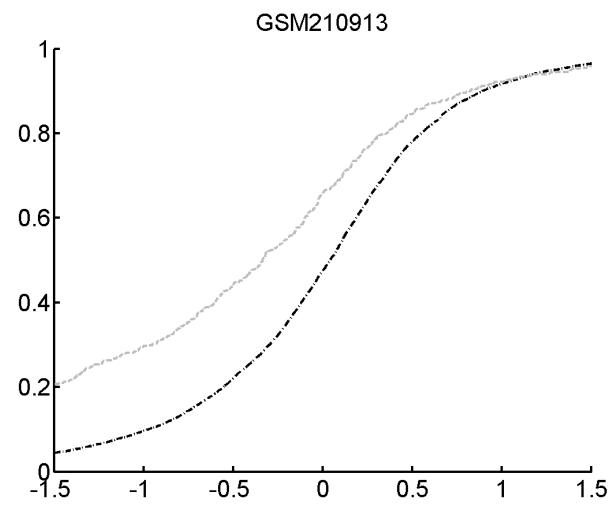
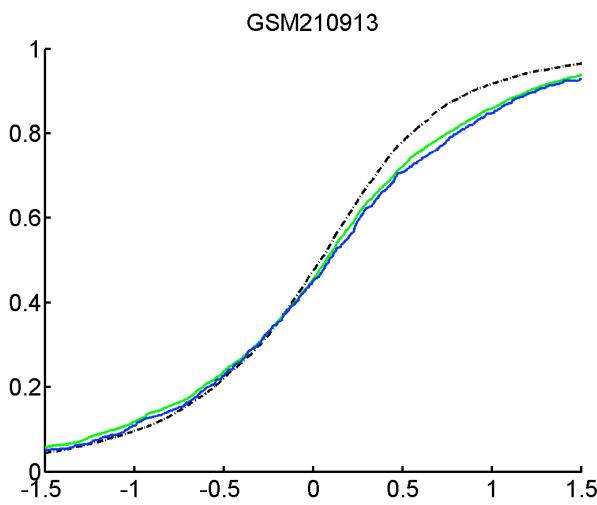
Experiment: GSM210911

mi/siRNA: miR-148b



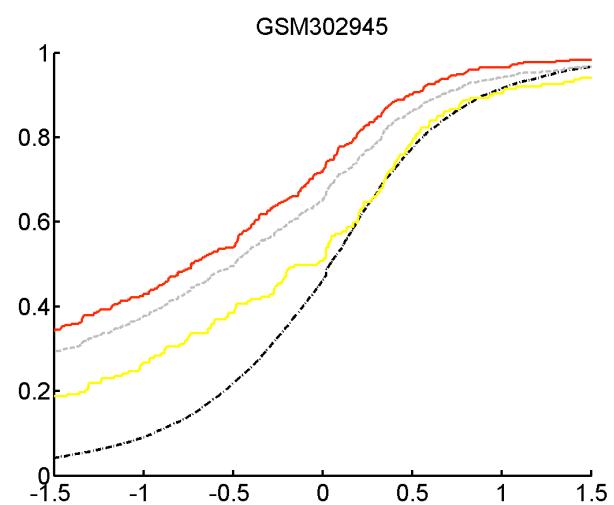
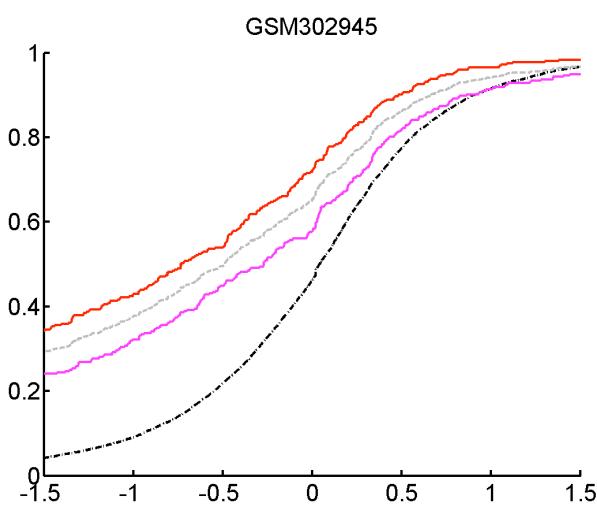
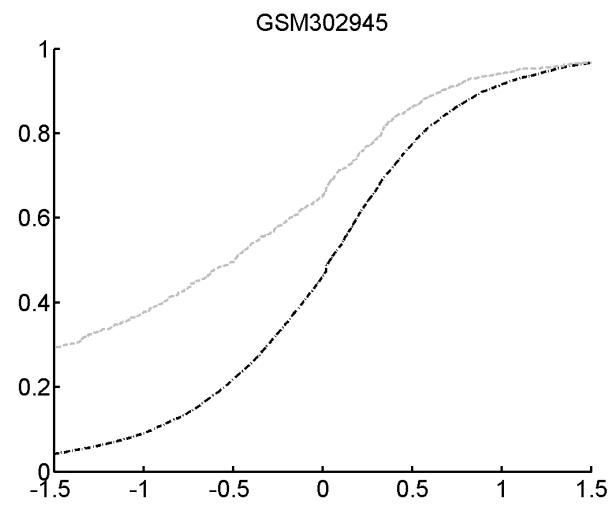
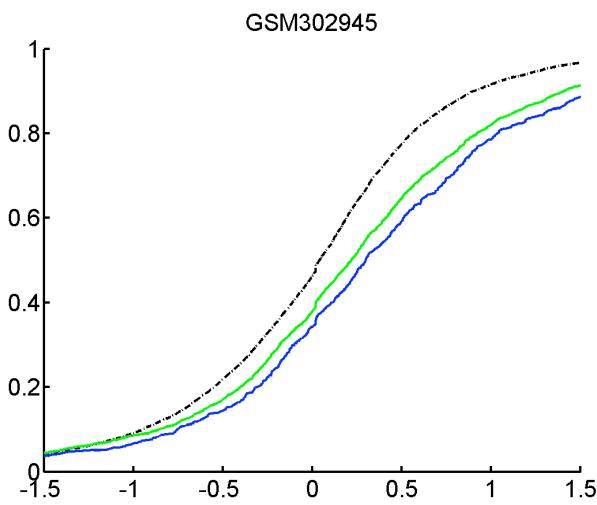
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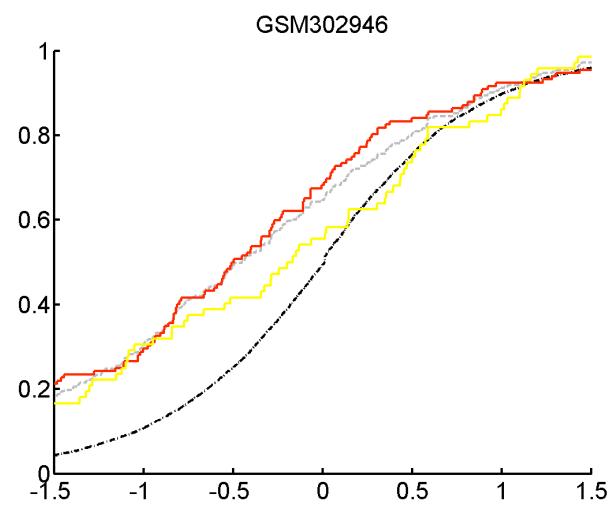
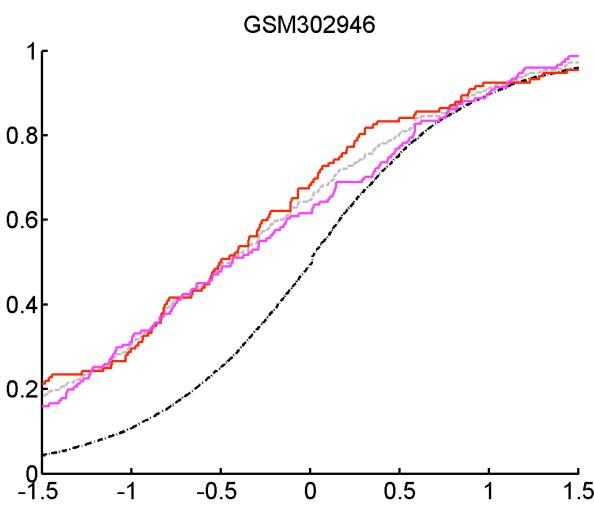
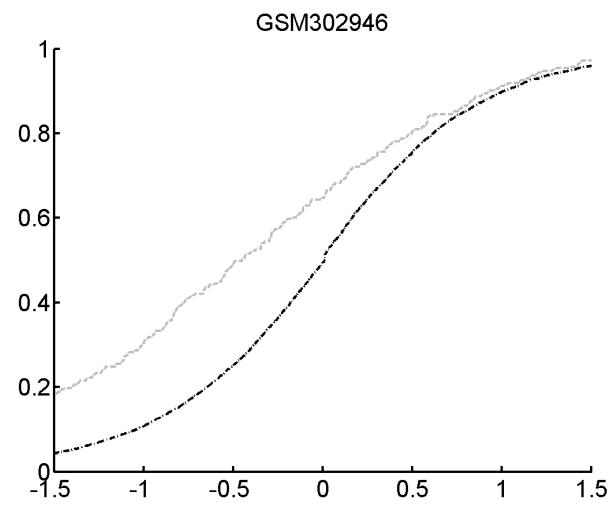
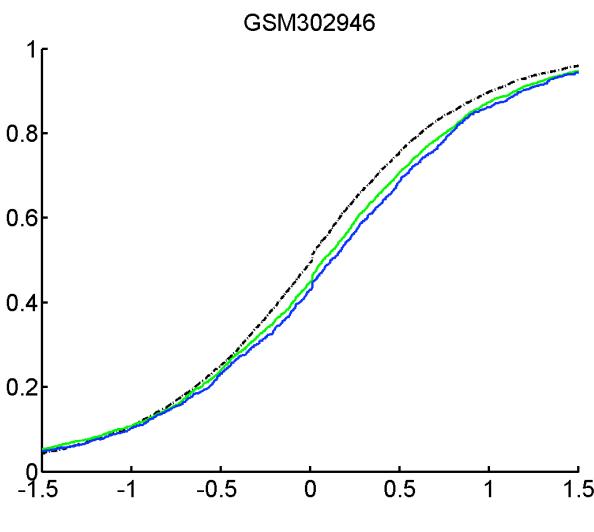
mi/siRNA: miR-181a



Experiment: GSM302945

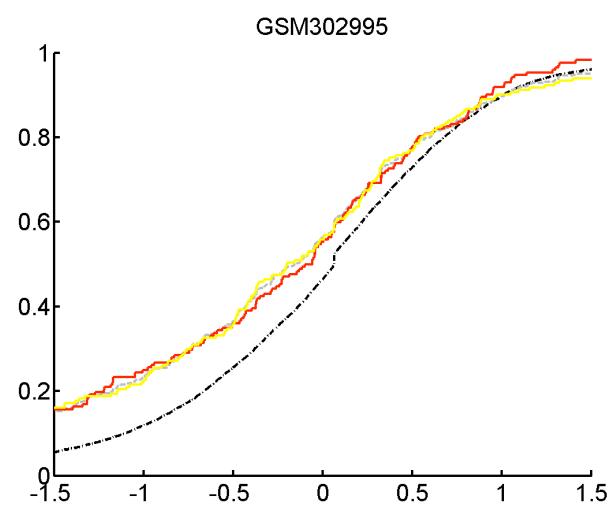
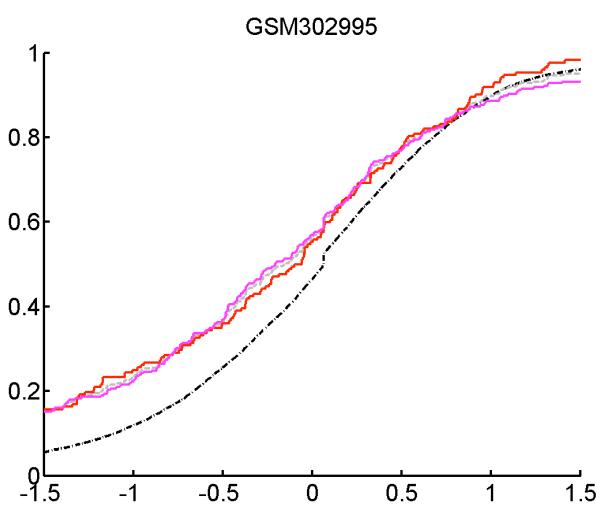
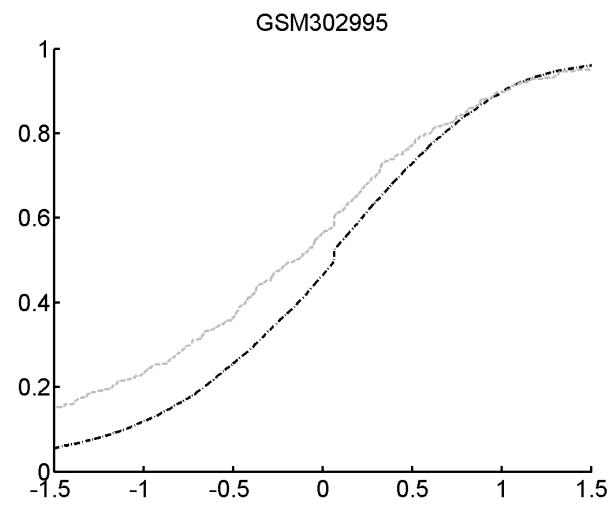
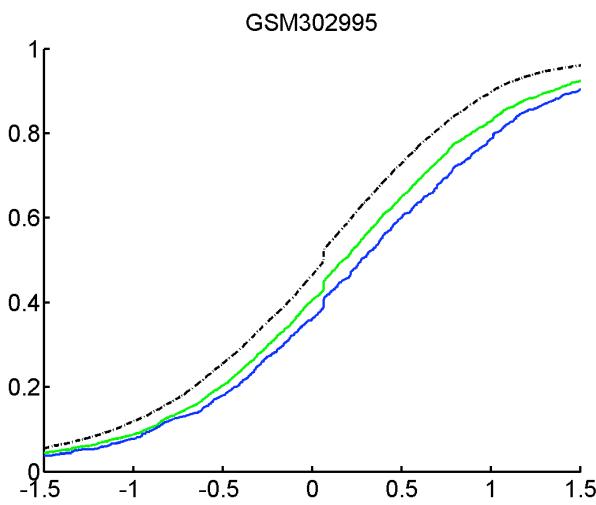
mi/siRNA: miR-124





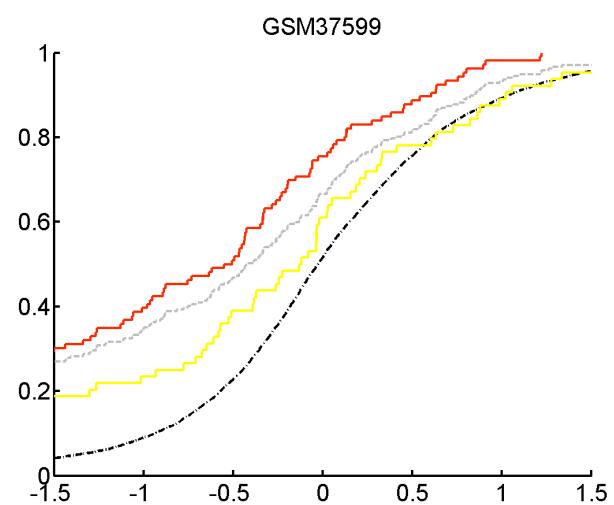
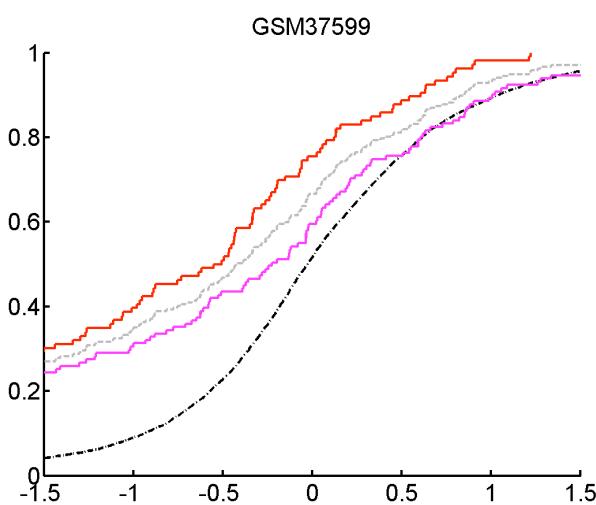
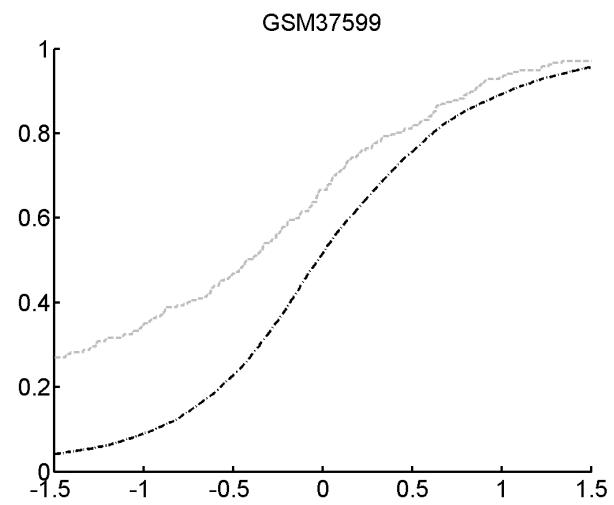
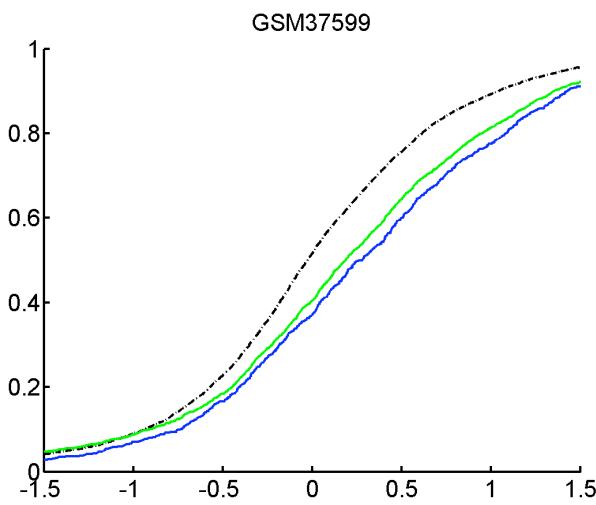
Experiment: GSM302995

mi/siRNA: miR-181



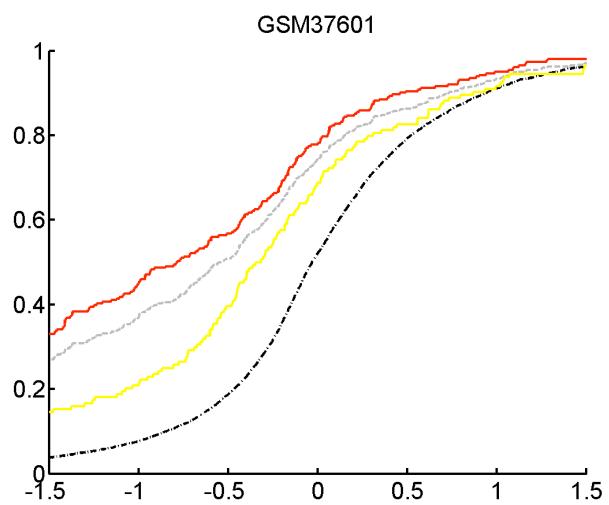
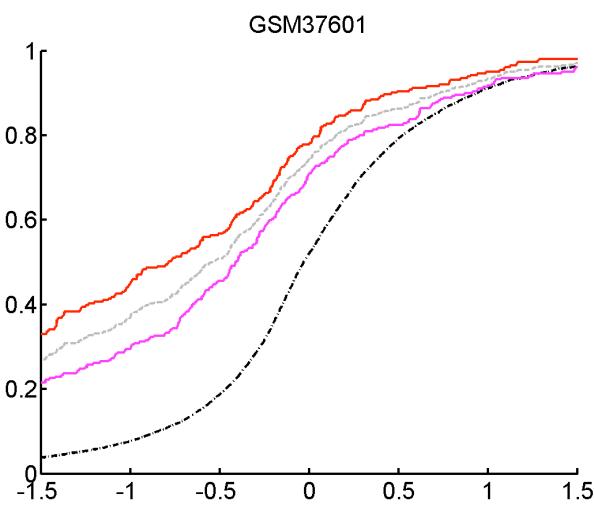
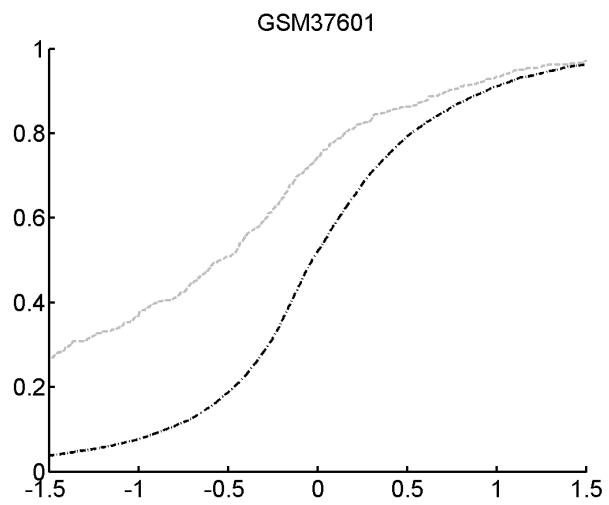
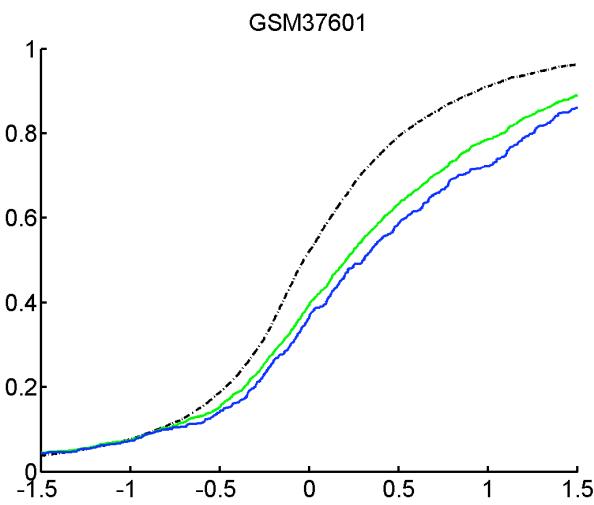
Experiment: GSM37599

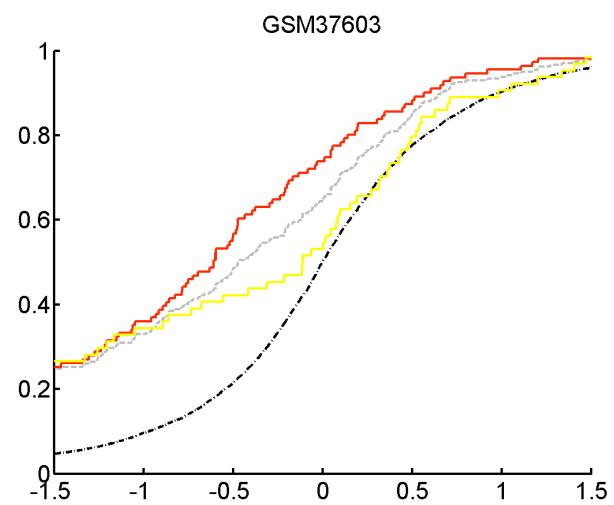
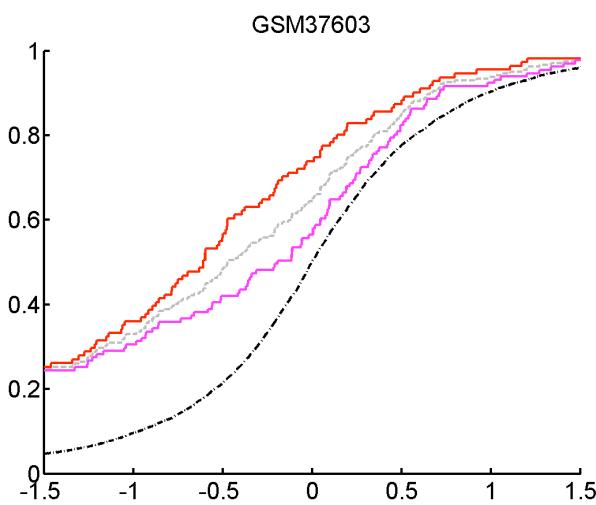
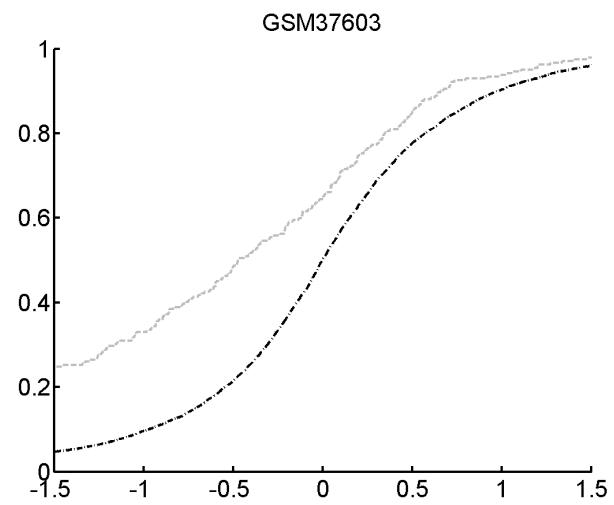
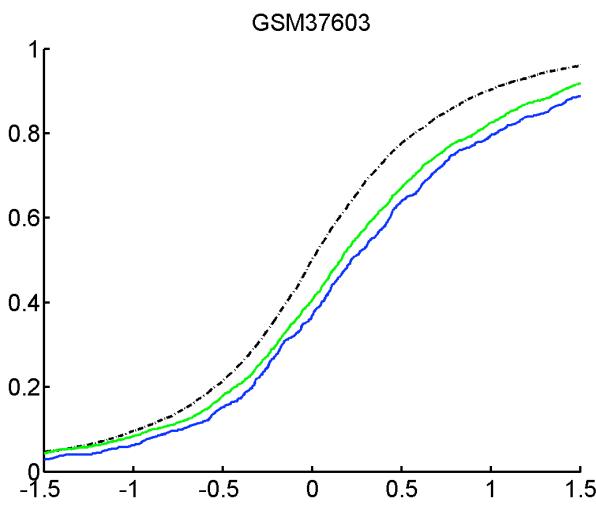
mi/siRNA: miR-1



Experiment: GSM37601

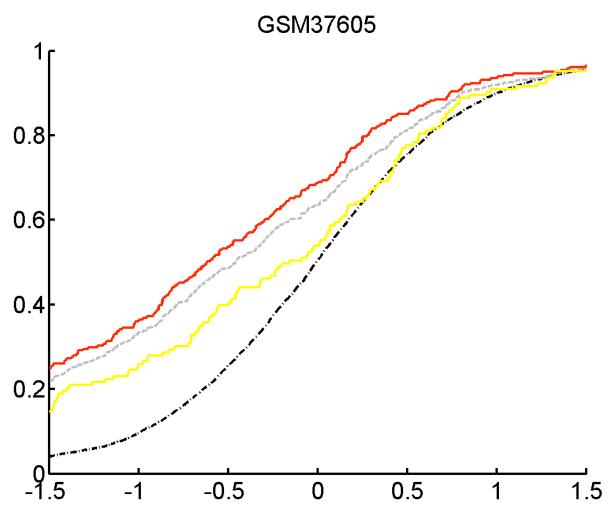
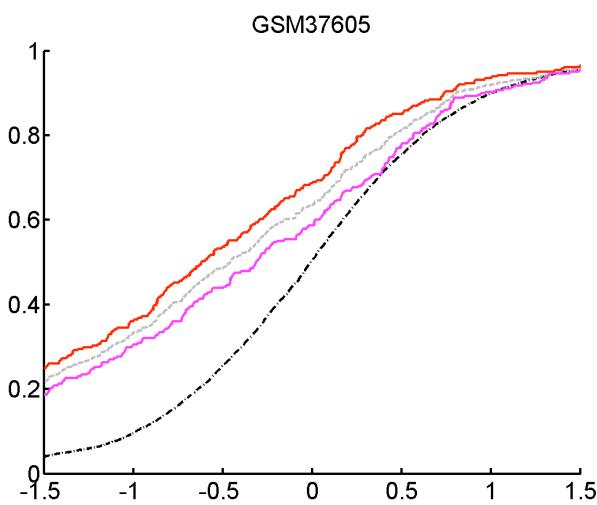
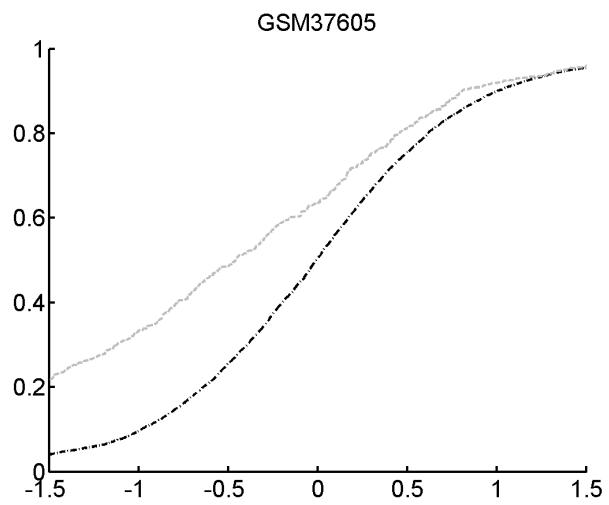
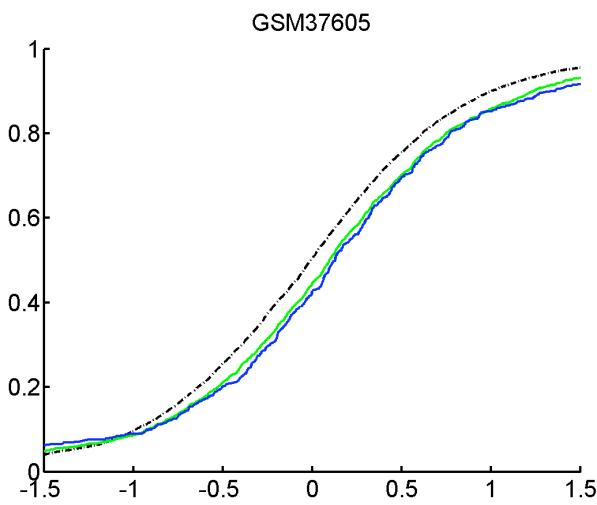
mi/siRNA: miR-124





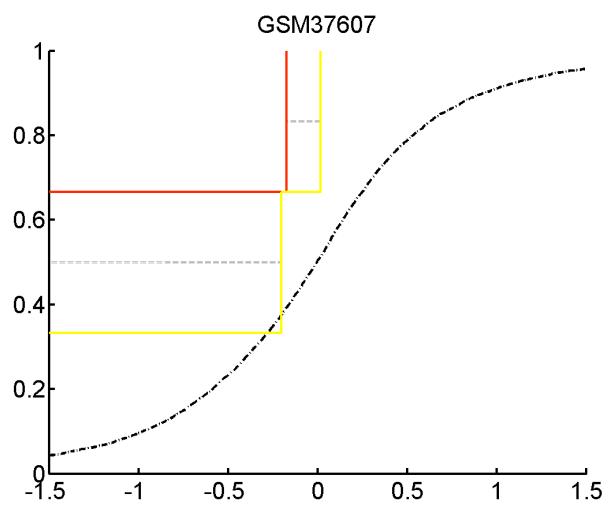
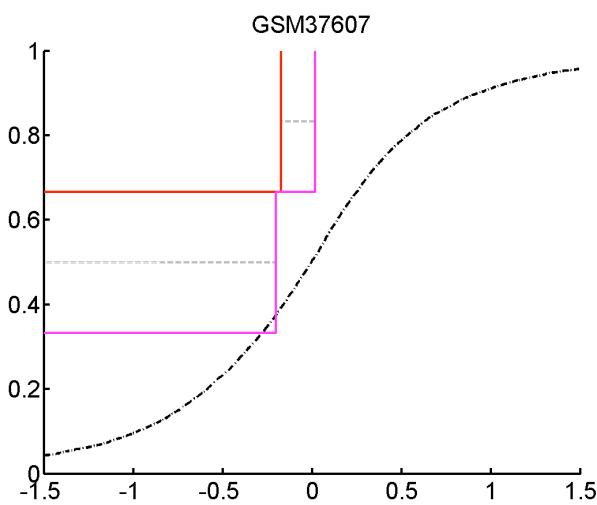
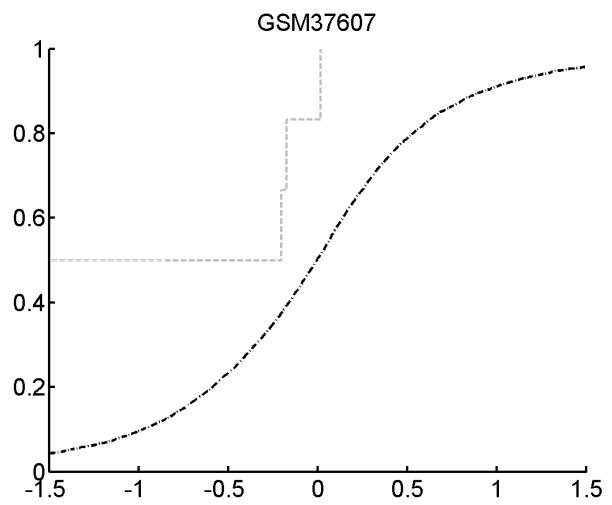
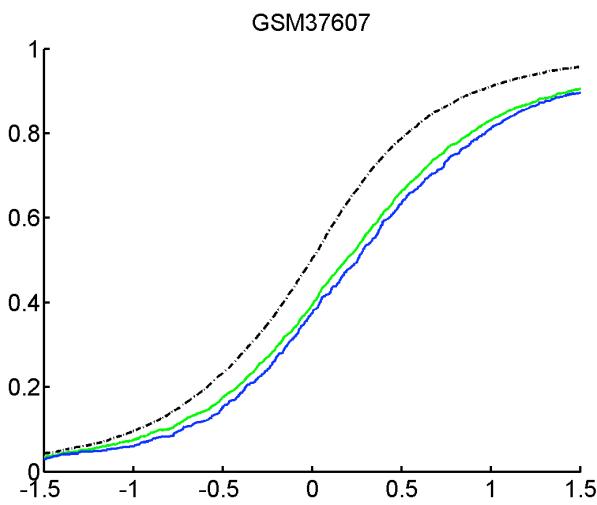
Experiment: GSM37605

mi/siRNA: chimiR-124-1



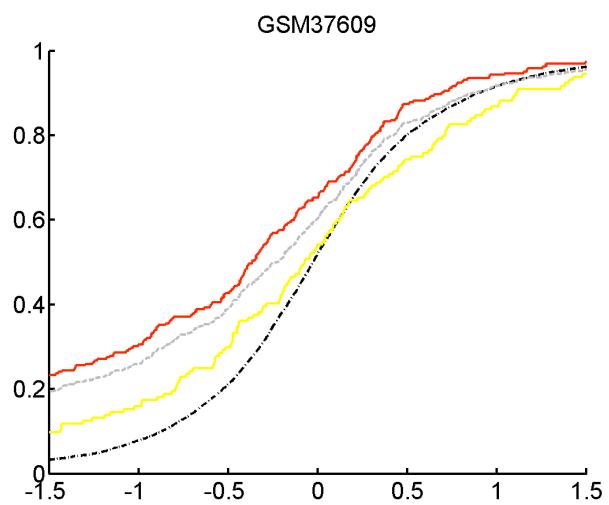
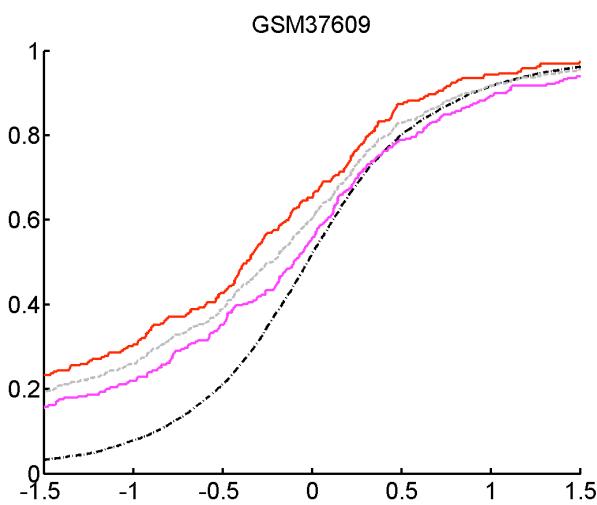
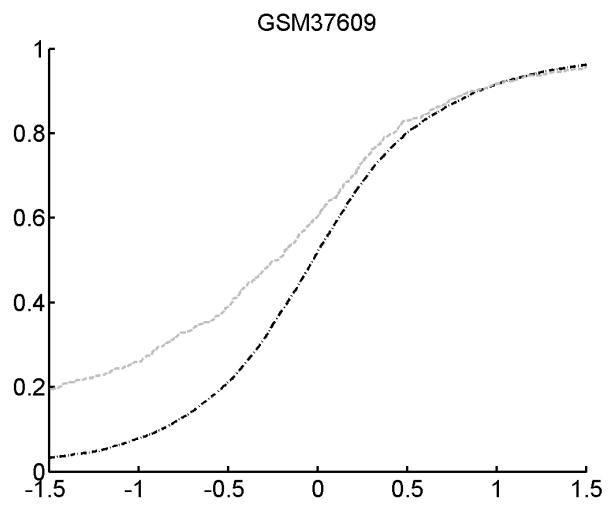
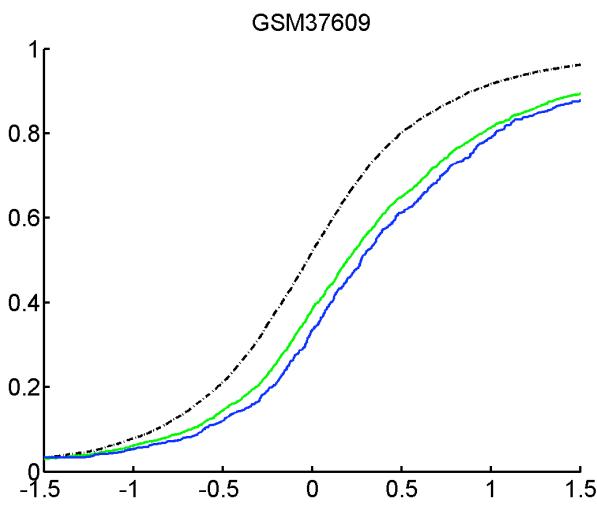
Experiment: GSM37607

mi/siRNA: miR-124mut5-6



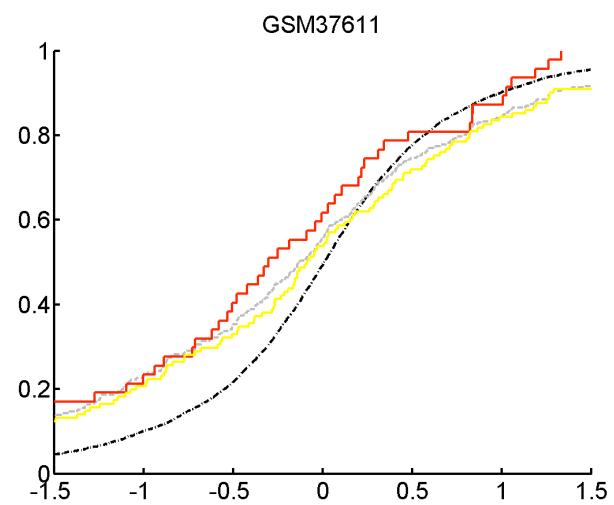
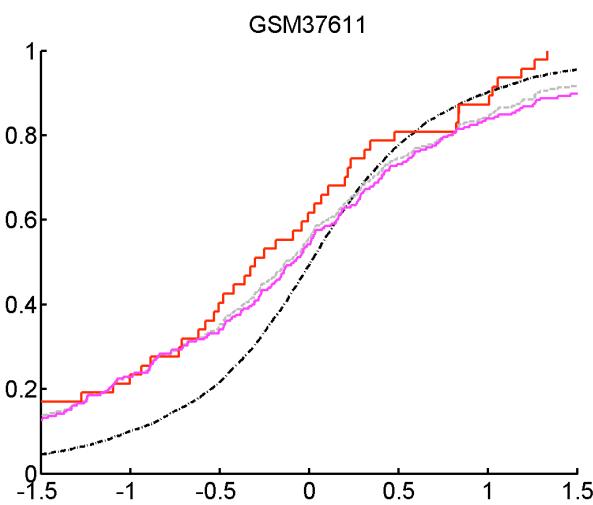
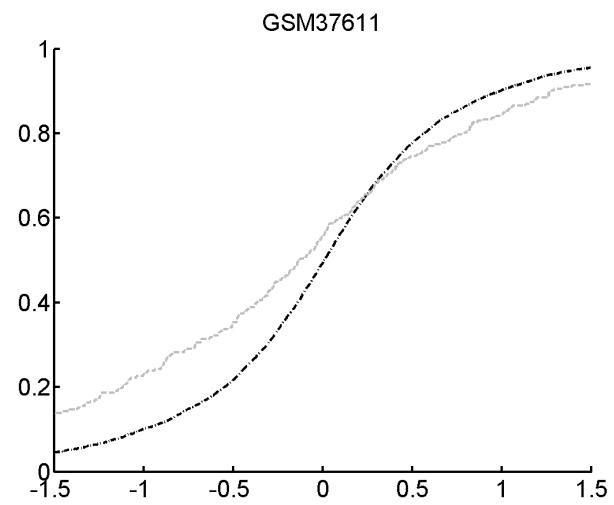
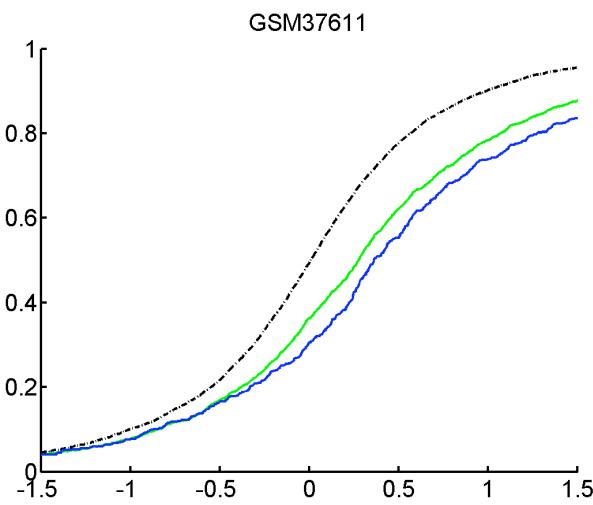
Experiment: GSM37609

mi/siRNA: miR-124mut9-10



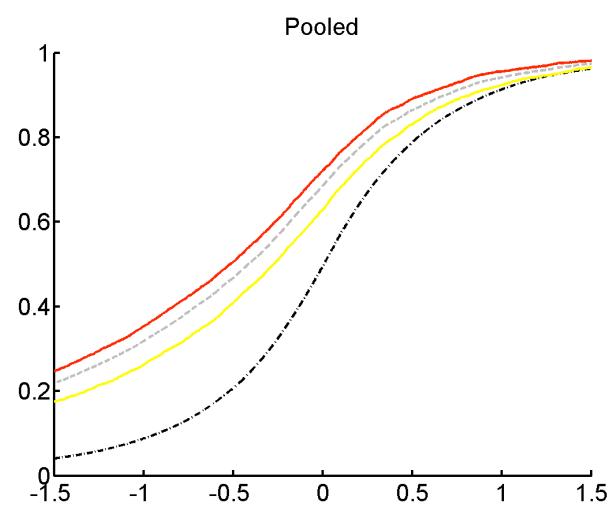
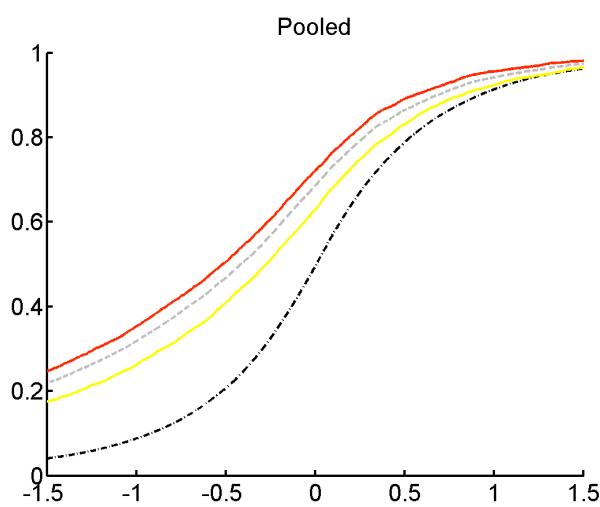
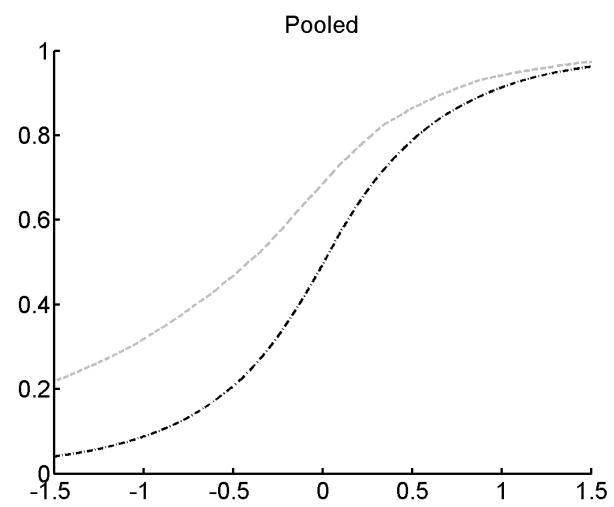
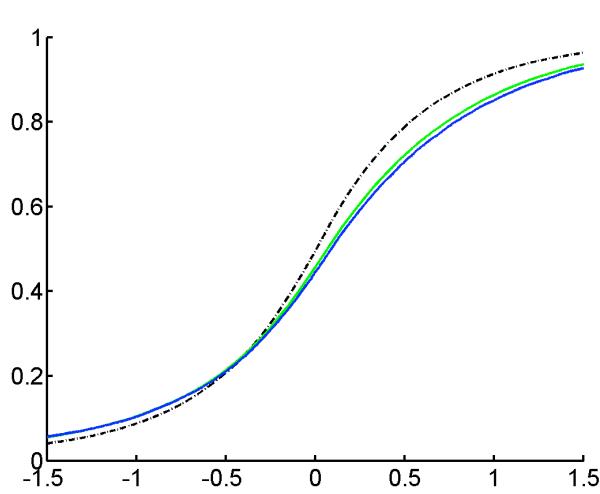
Experiment: GSM37611

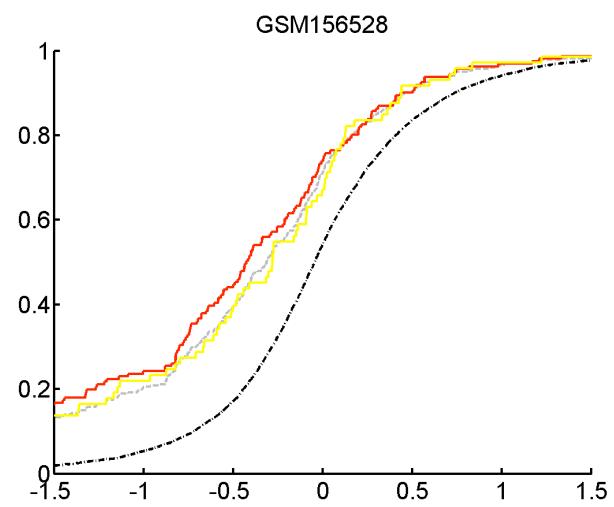
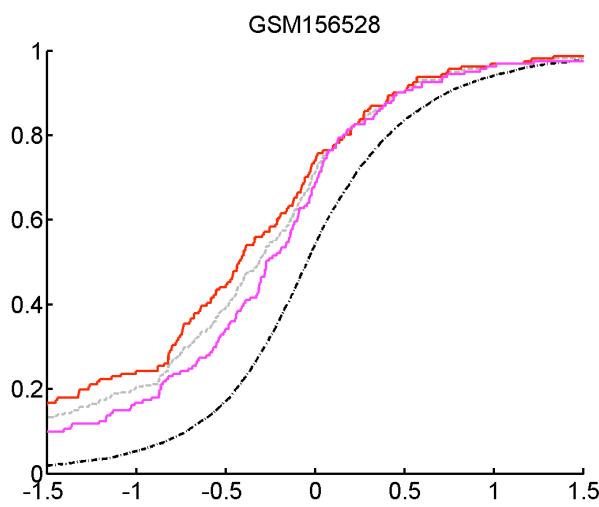
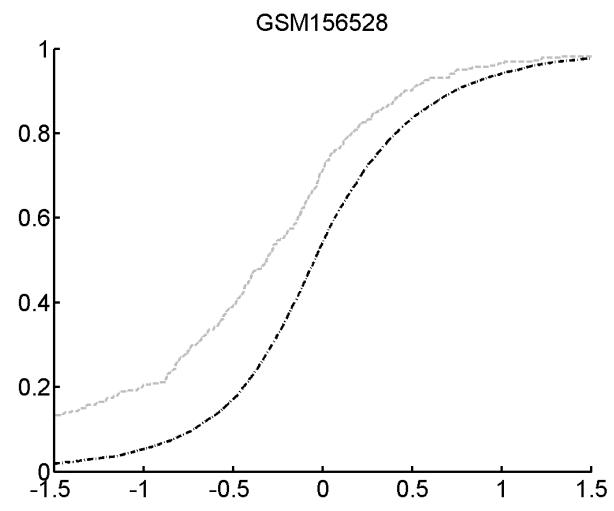
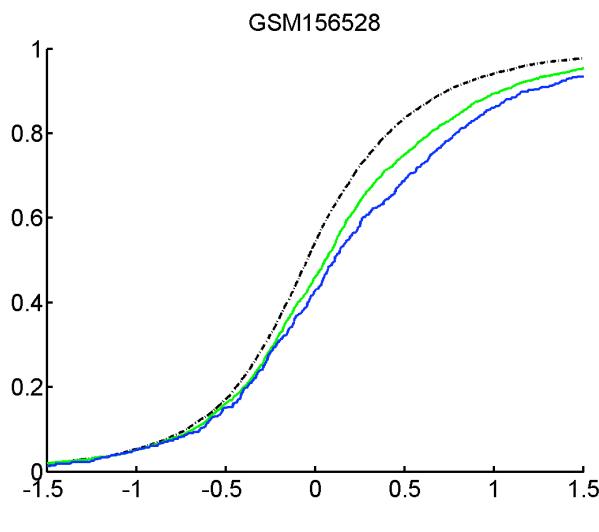
mi/siRNA: miR-373



Experiment: hela

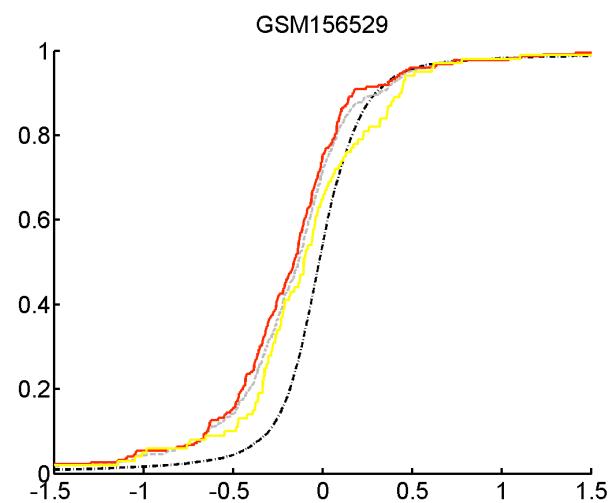
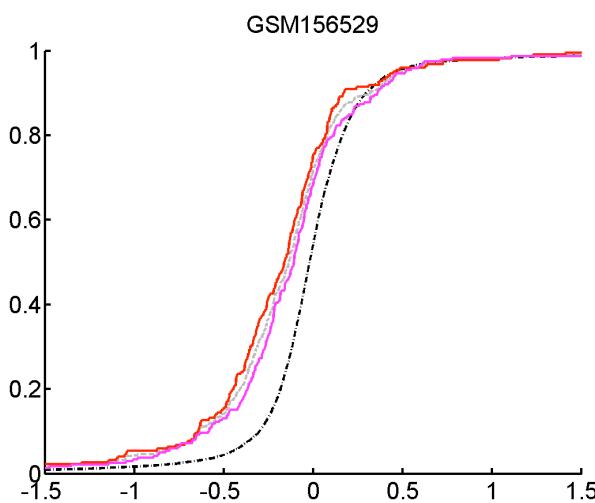
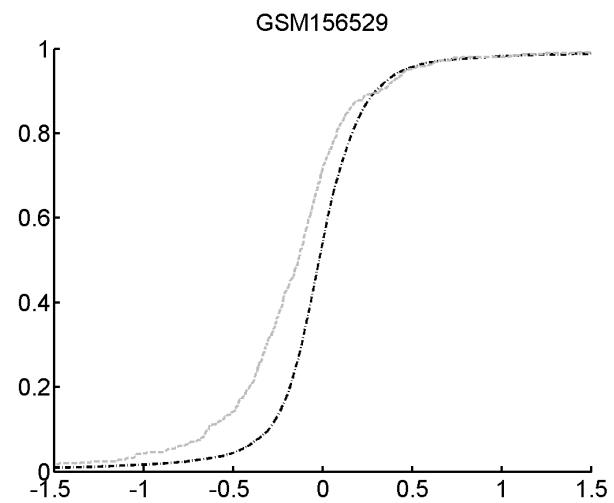
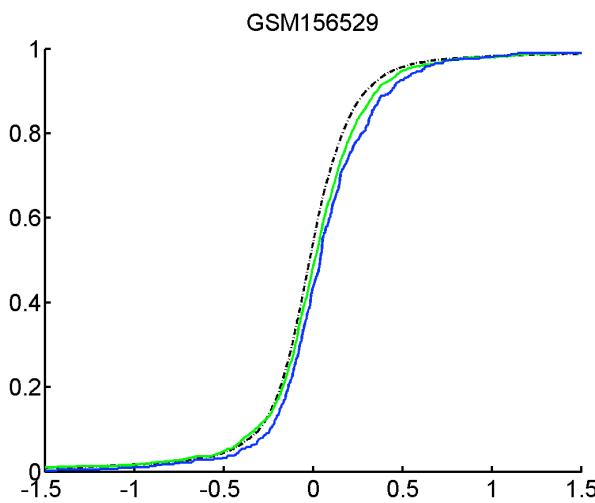
mi/siRNA: pooled

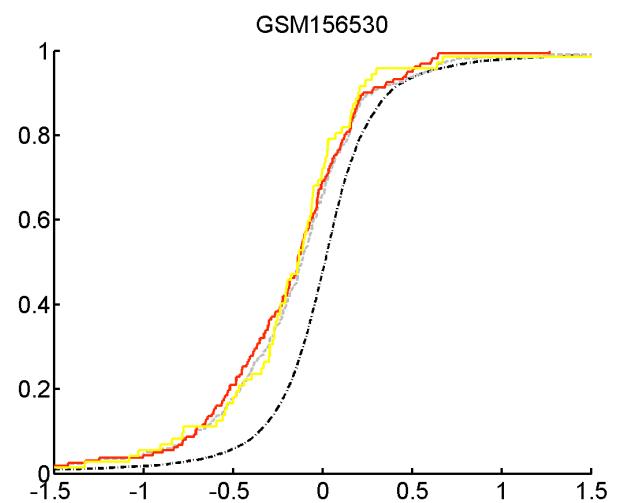
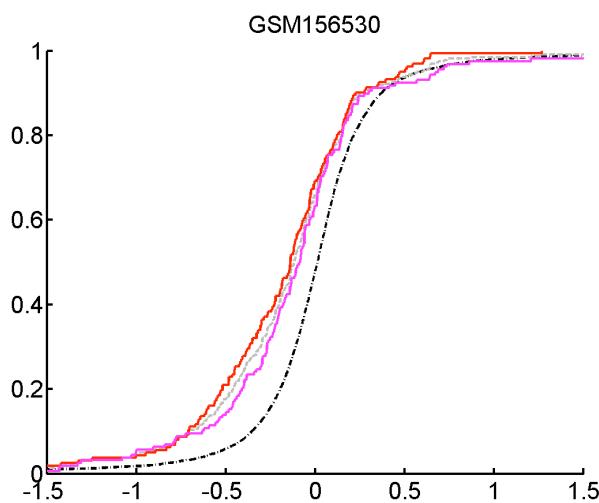
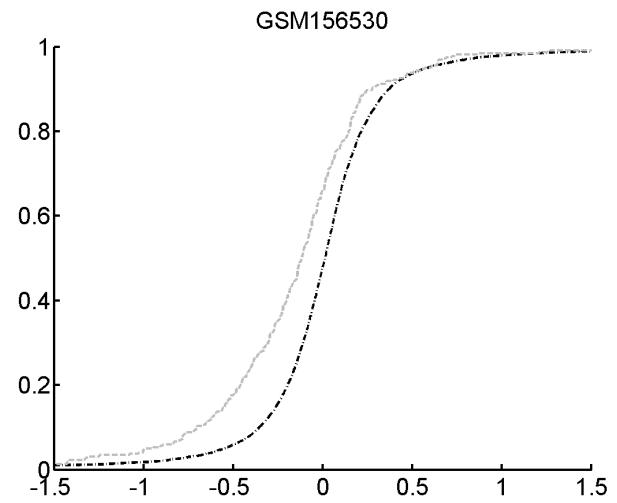
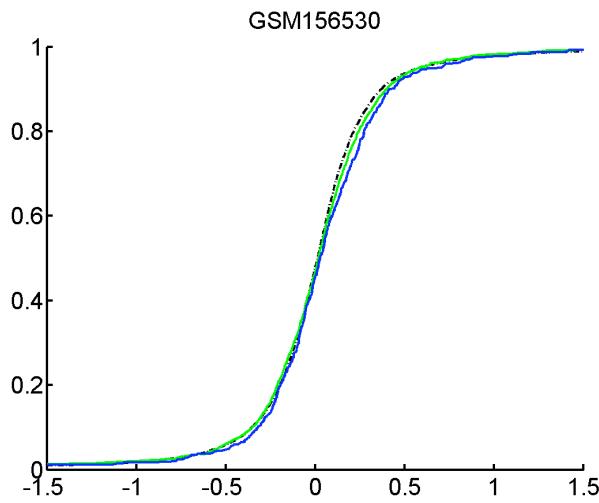




Experiment: GSM156529

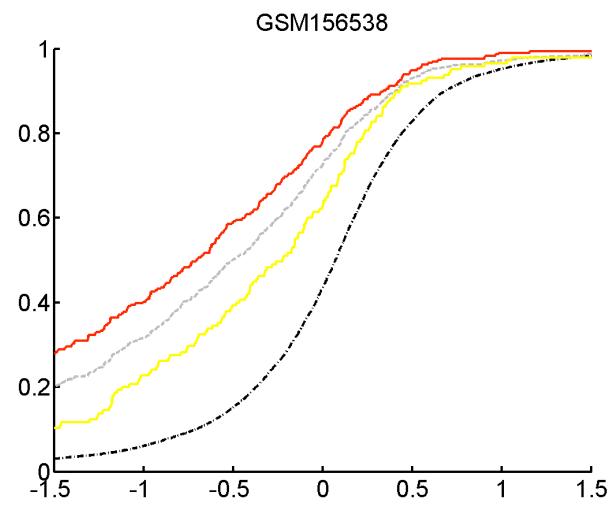
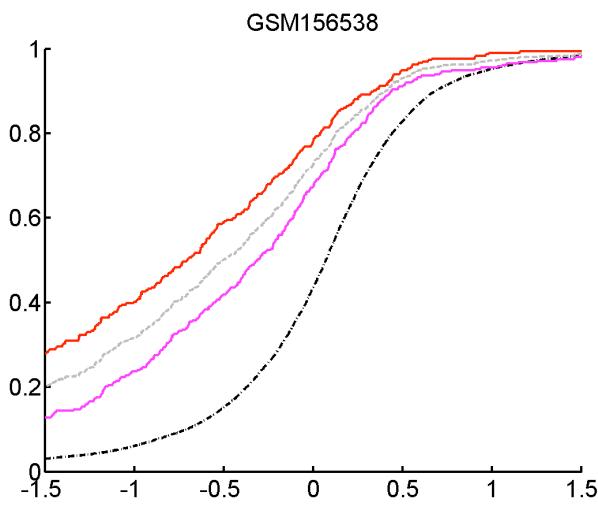
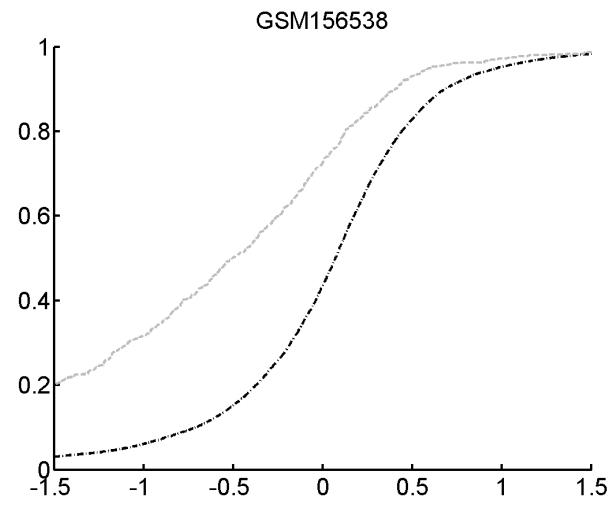
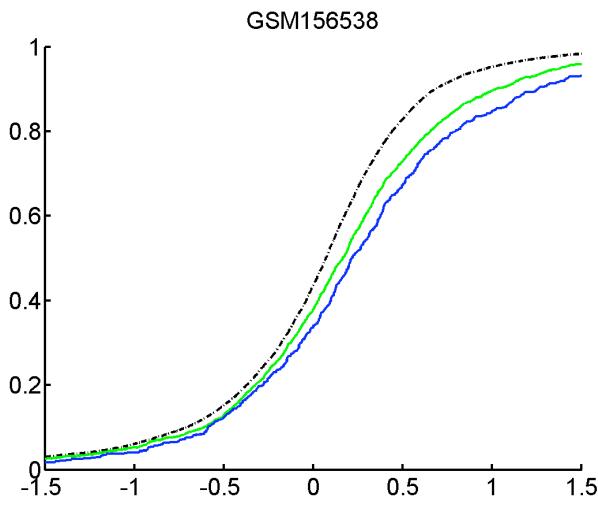
mi/siRNA: siRNA-200b





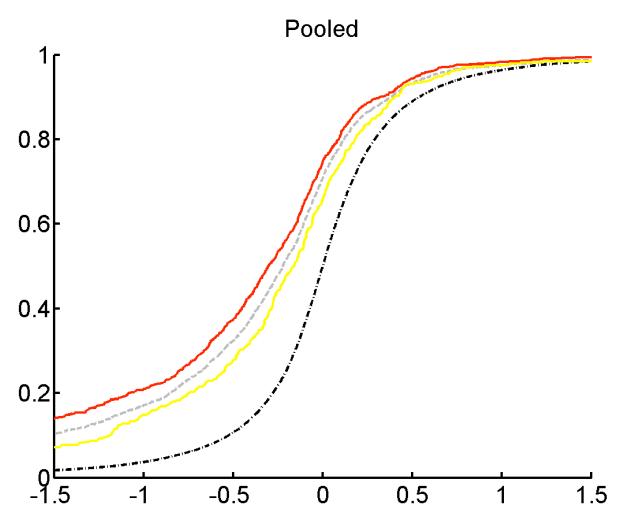
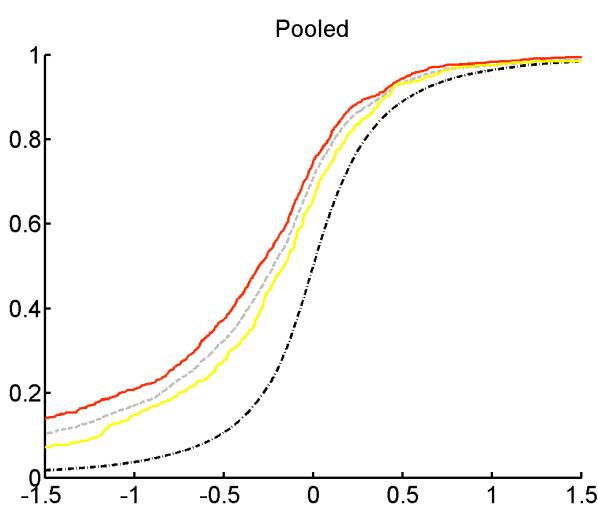
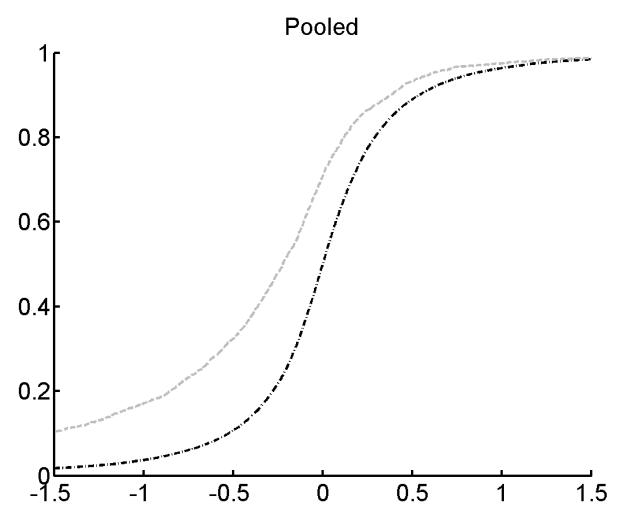
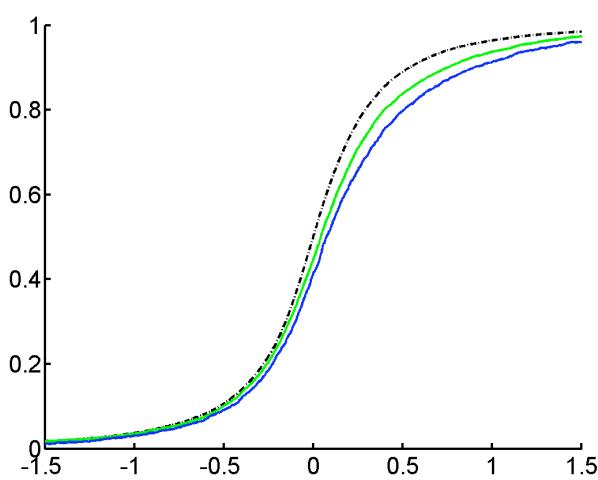
Experiment: GSM156538

mi/siRNA: miR-106b



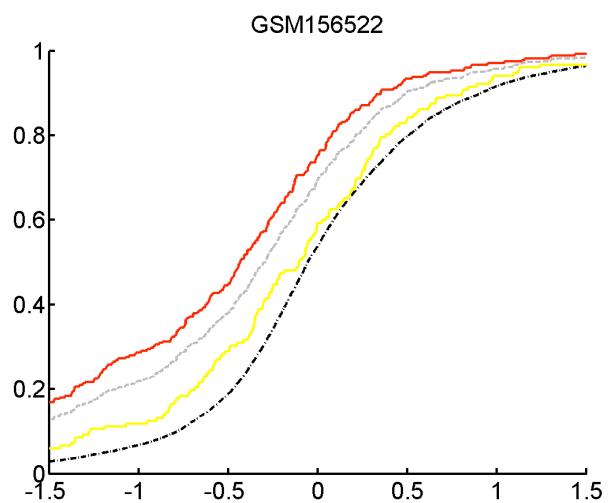
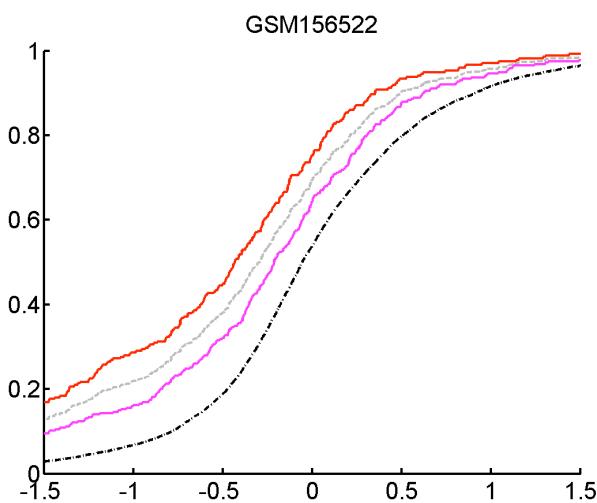
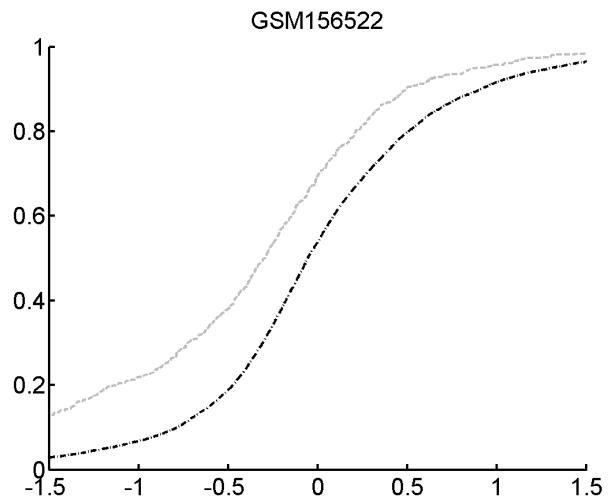
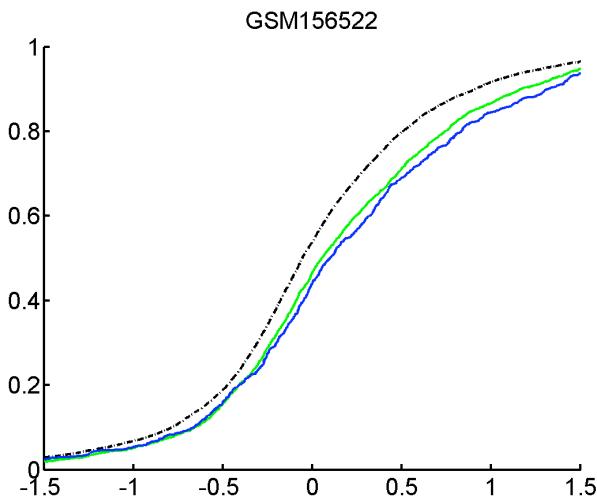
Experiment: hct116

mi/siRNA: pooled



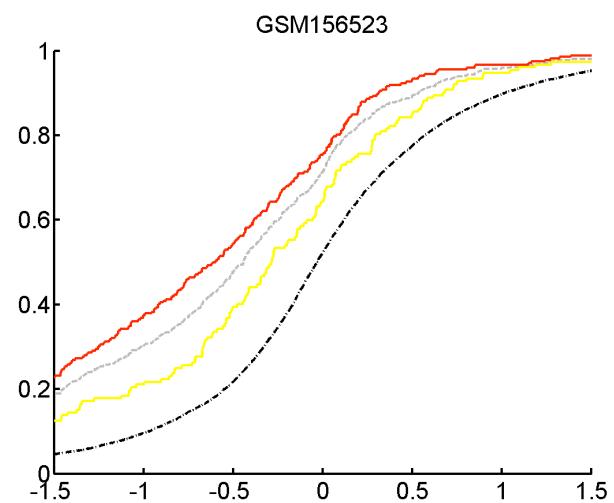
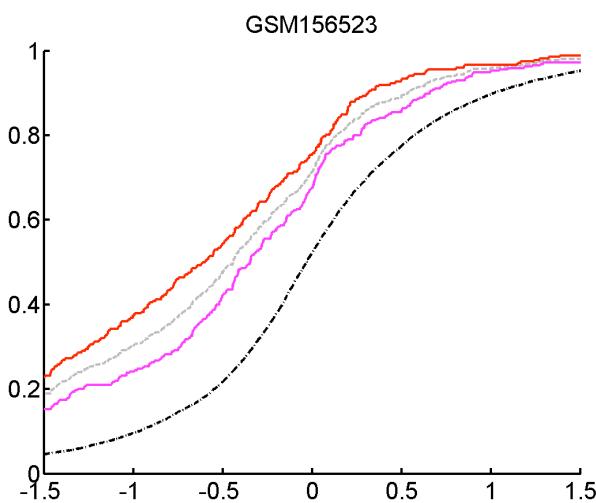
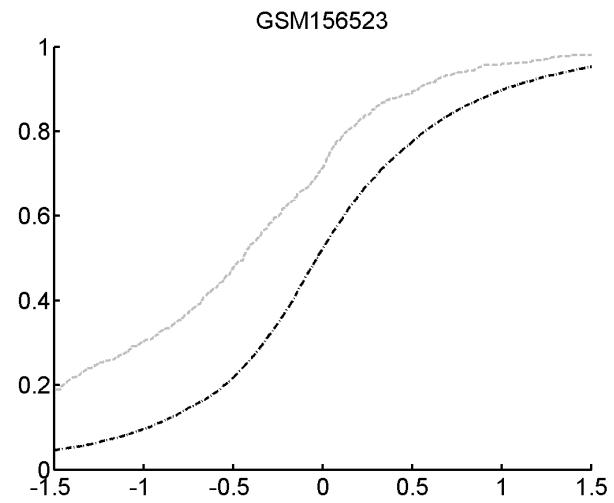
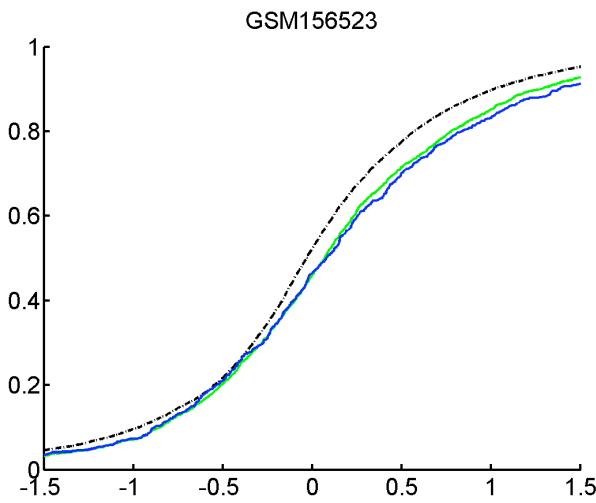
Experiment: GSM156522

mi/siRNA: miR-16



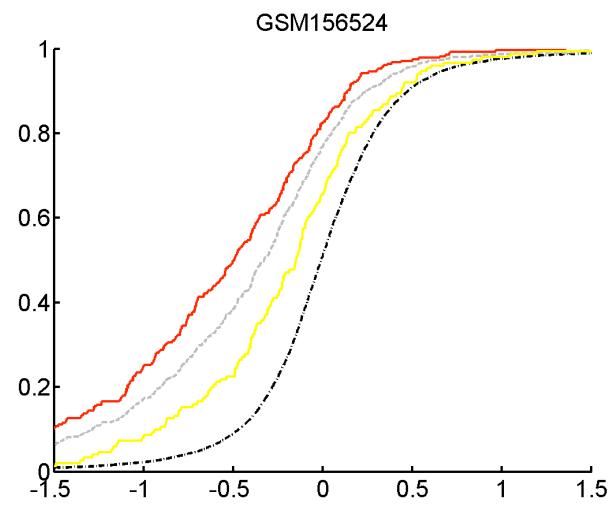
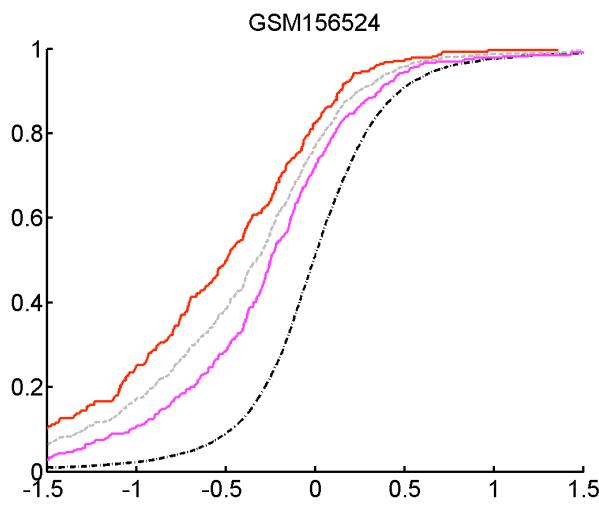
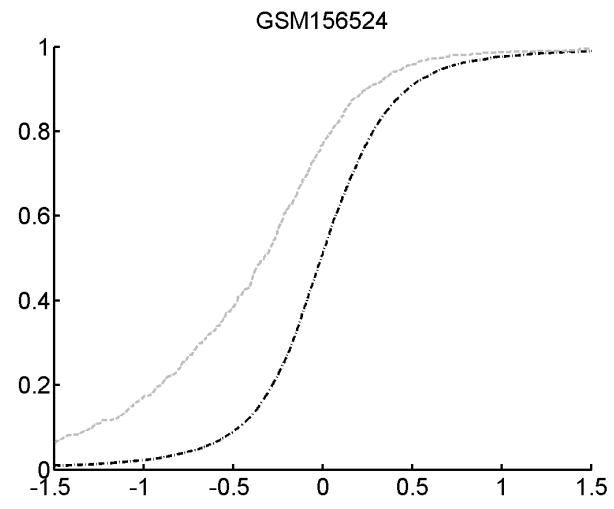
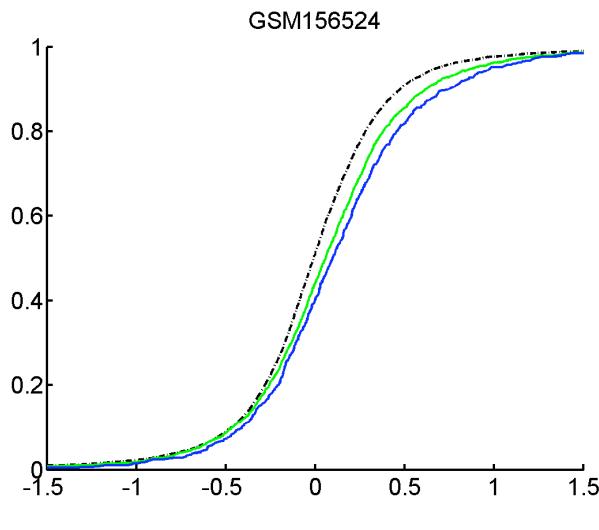
Experiment: GSM156523

mi/siRNA: miR-15a



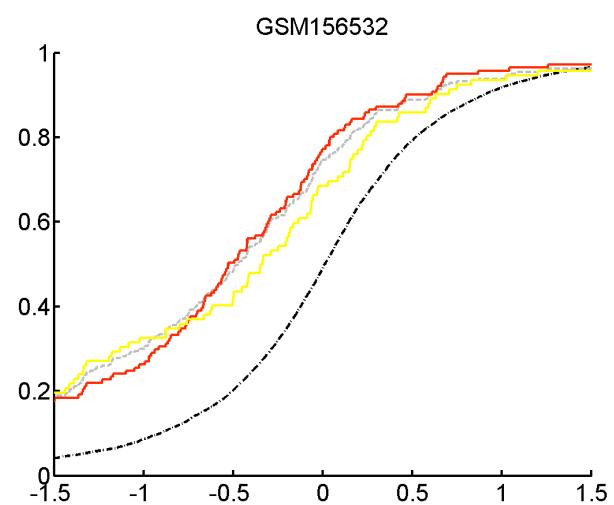
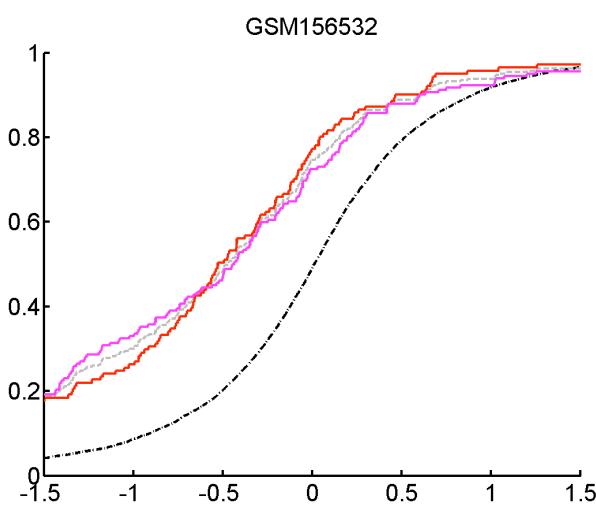
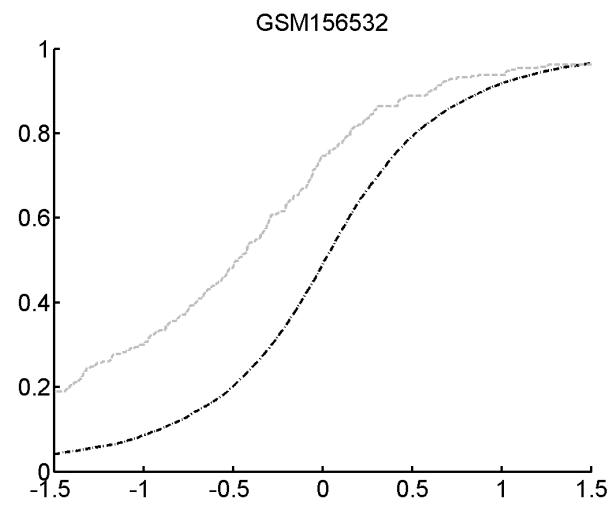
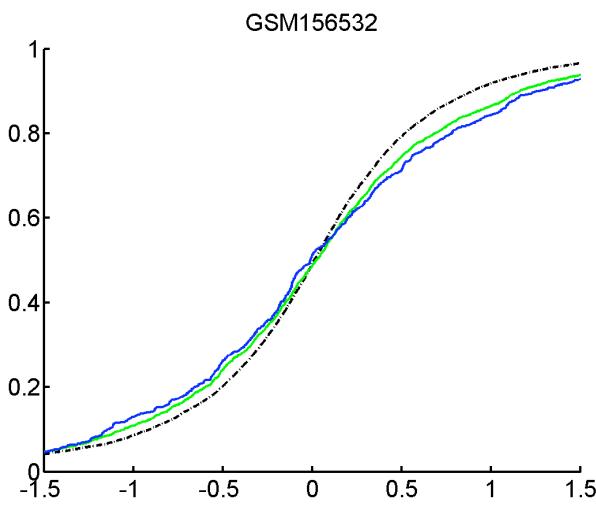
Experiment: GSM156524

mi/siRNA: miR-106b



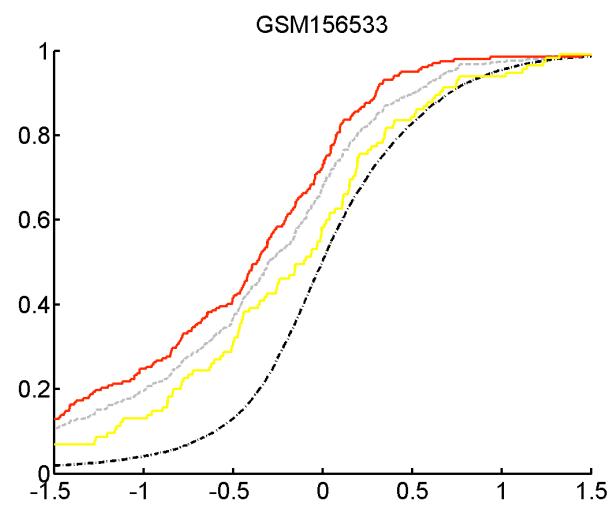
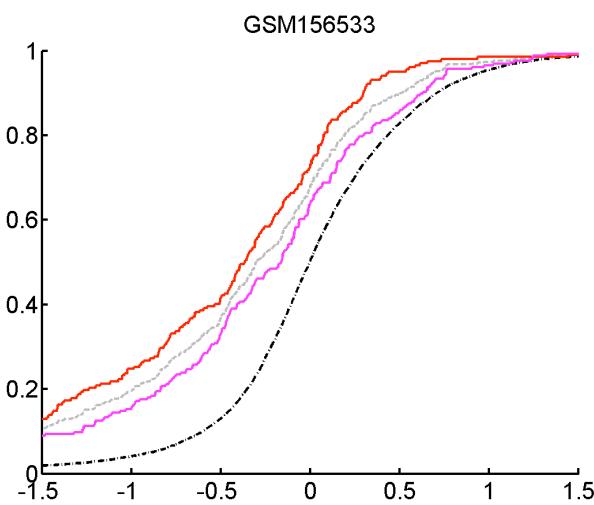
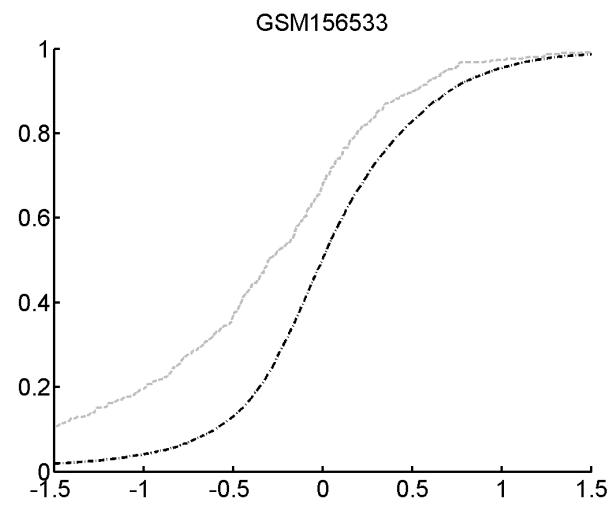
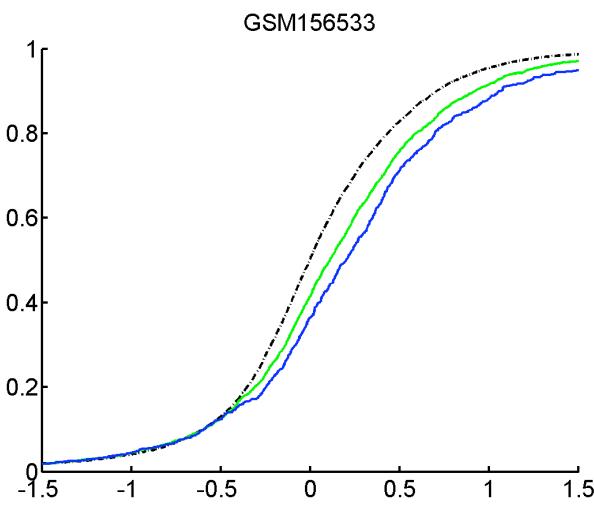
Experiment: GSM156532

mi/siRNA: siRNA-200a



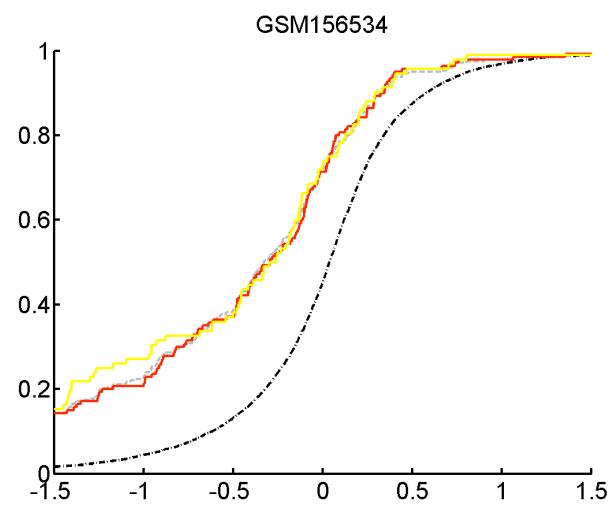
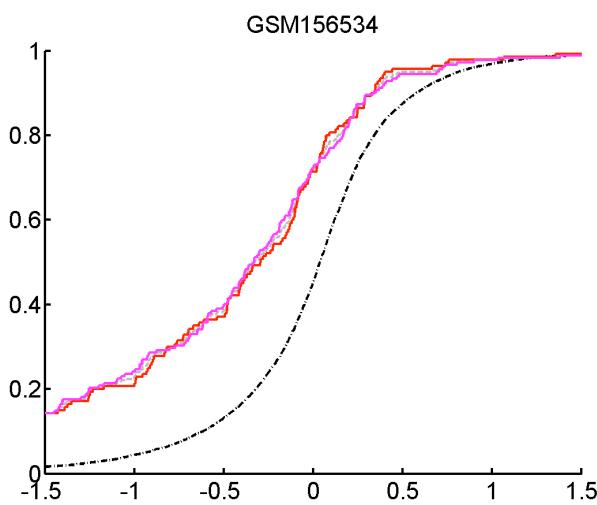
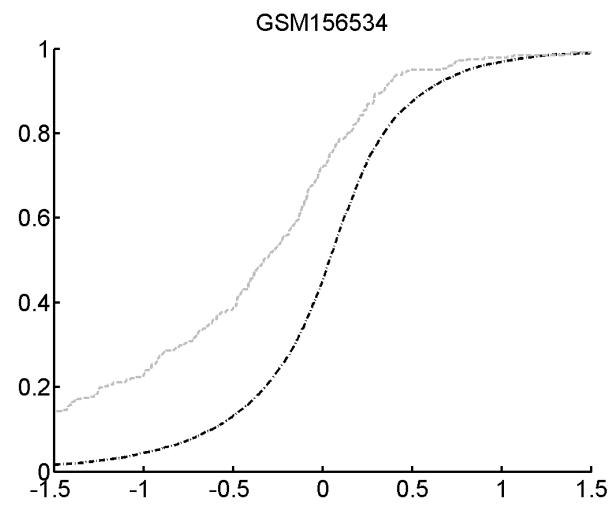
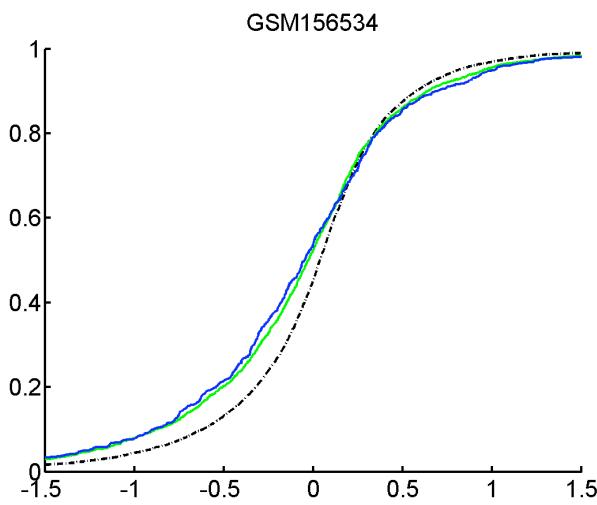
Experiment: GSM156533

mi/siRNA: siRNA-200b



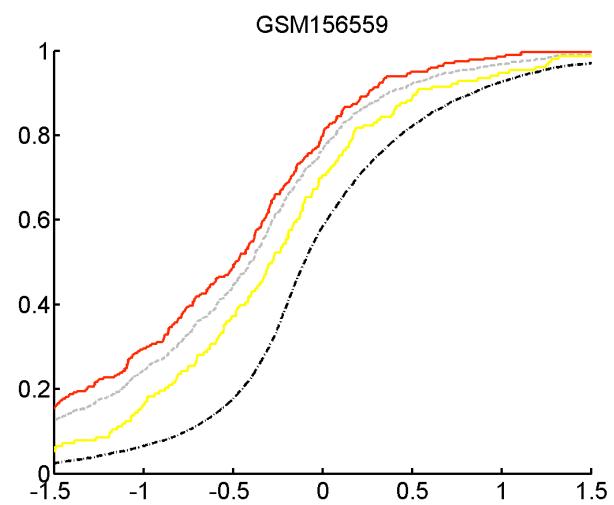
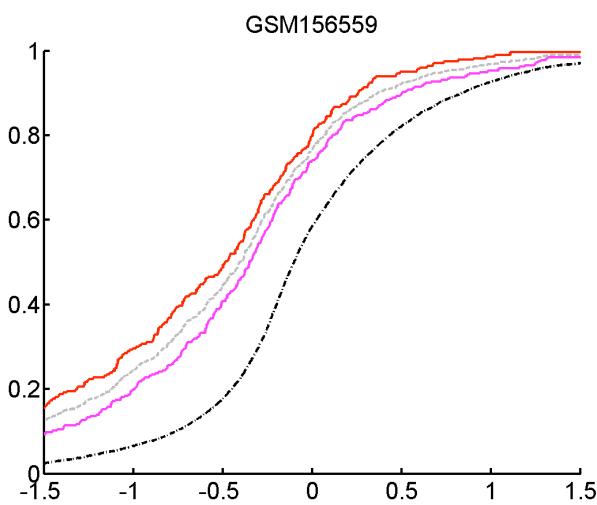
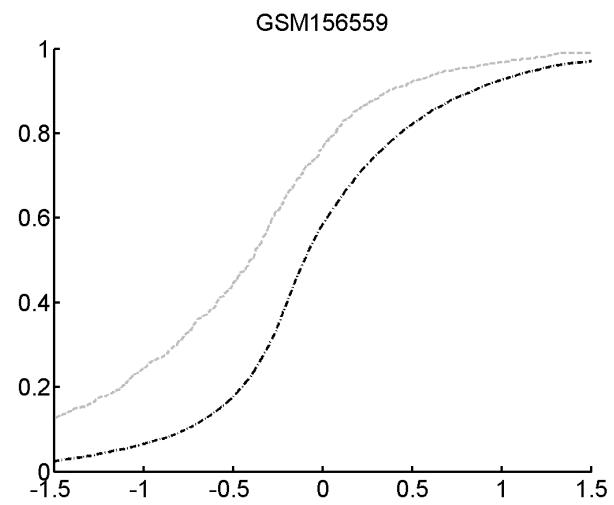
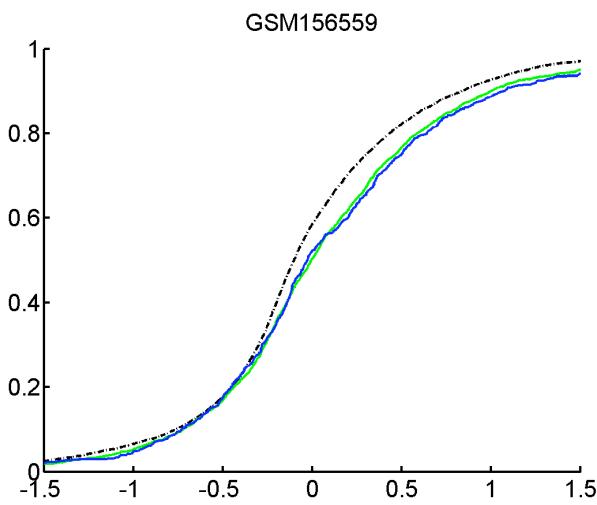
Experiment: GSM156534

mi/siRNA: siRNA-141



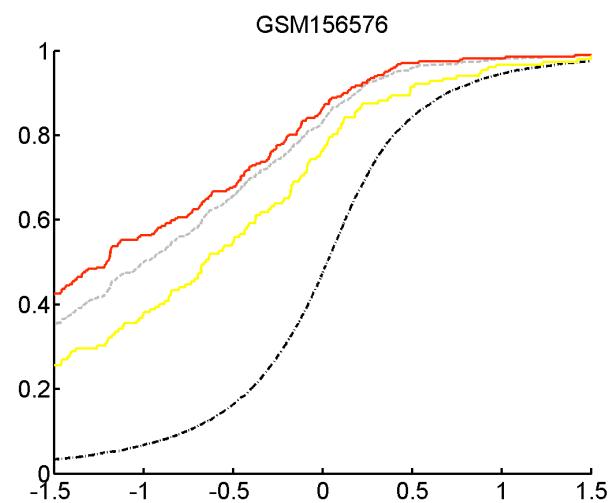
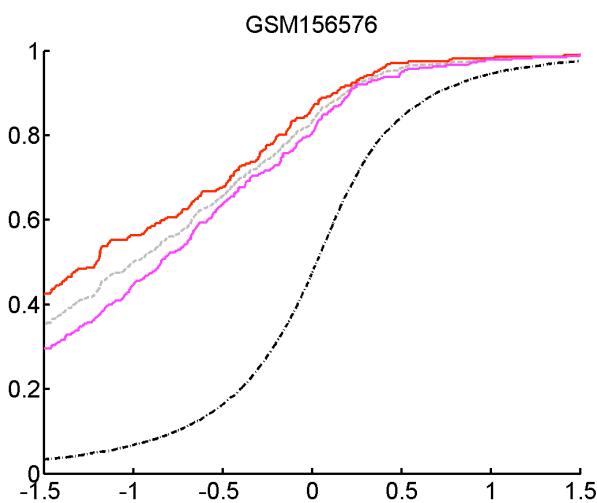
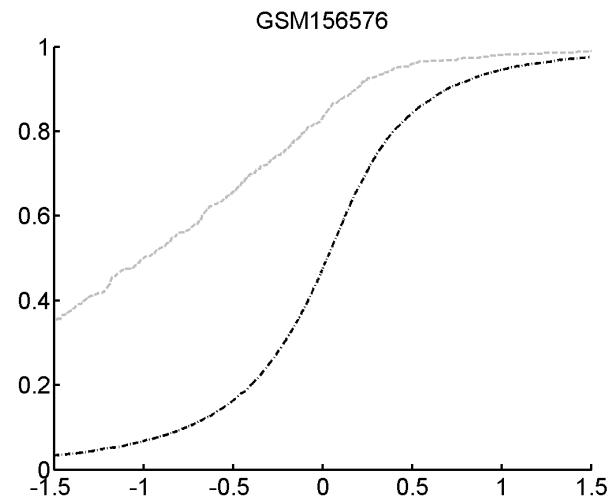
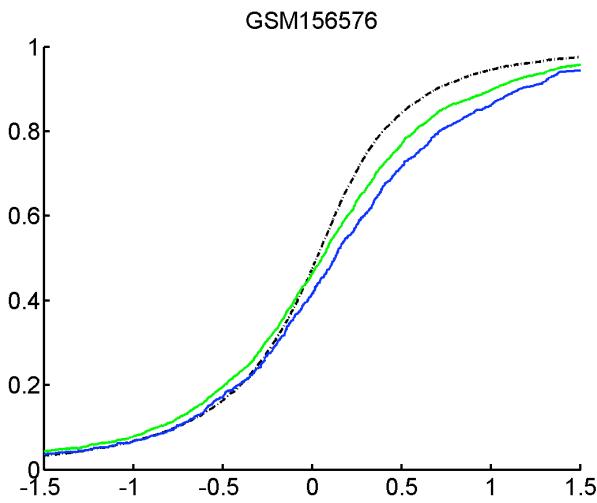
Experiment: GSM156559

mi/siRNA: miR-195



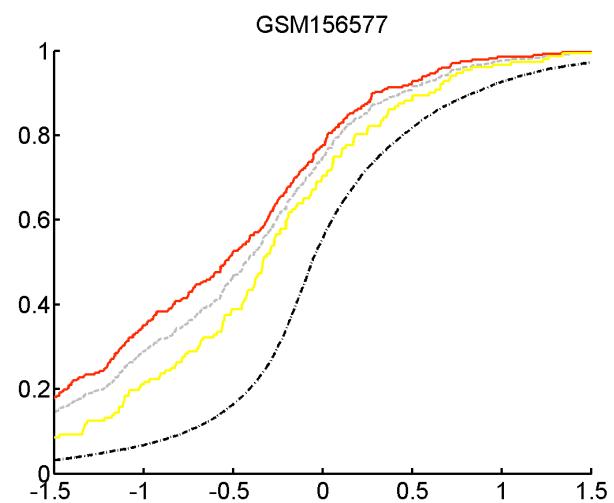
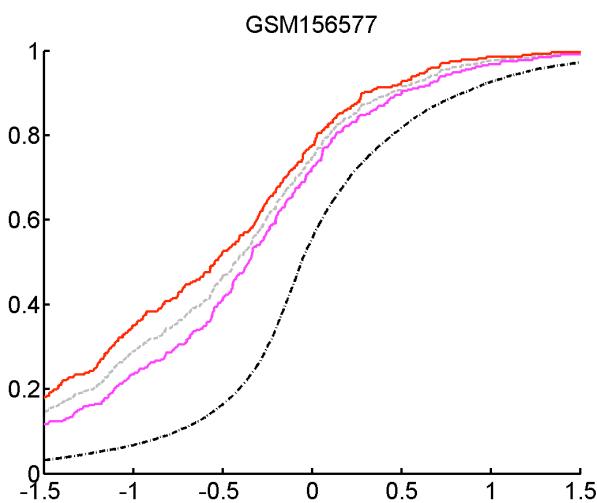
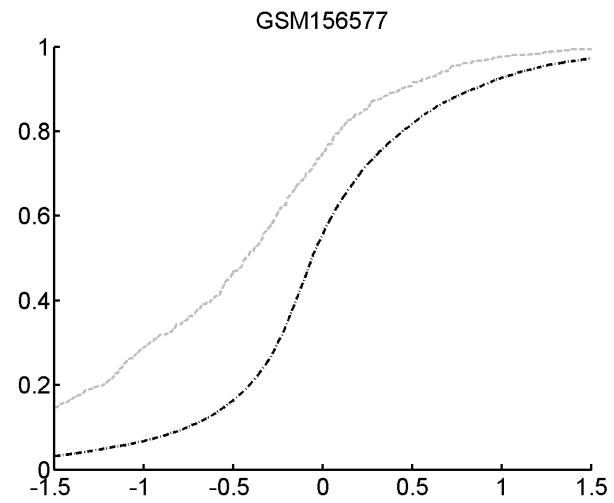
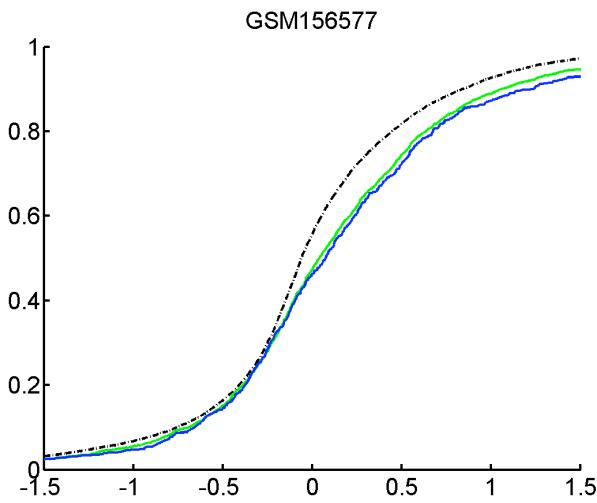
Experiment: GSM156576

mi/siRNA: miR-106b



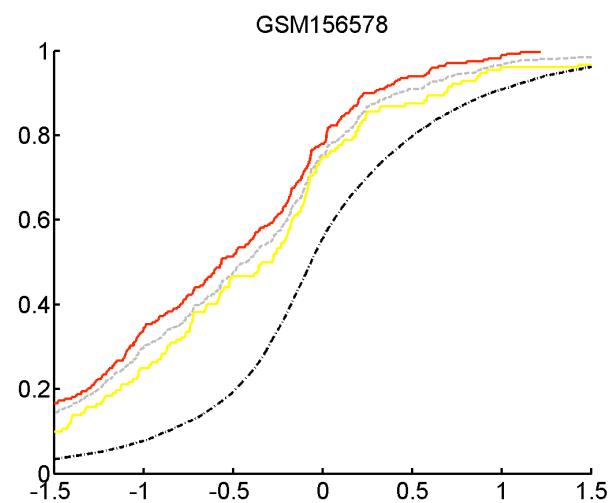
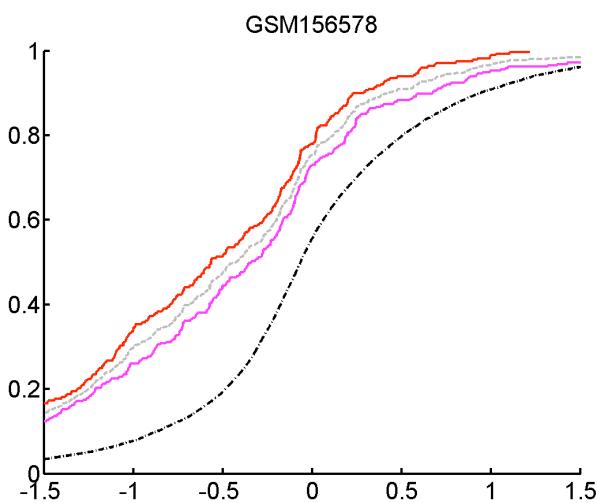
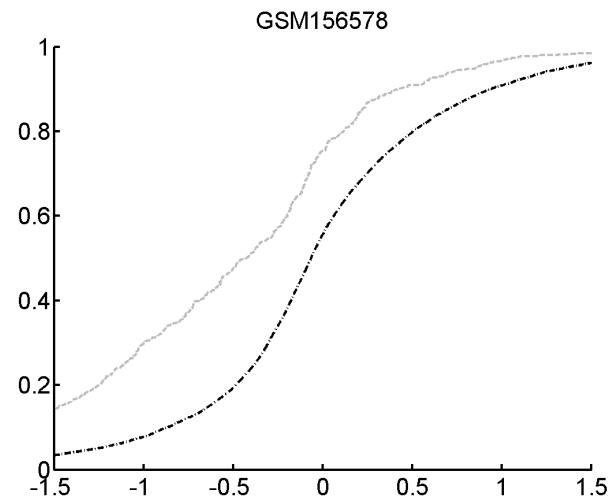
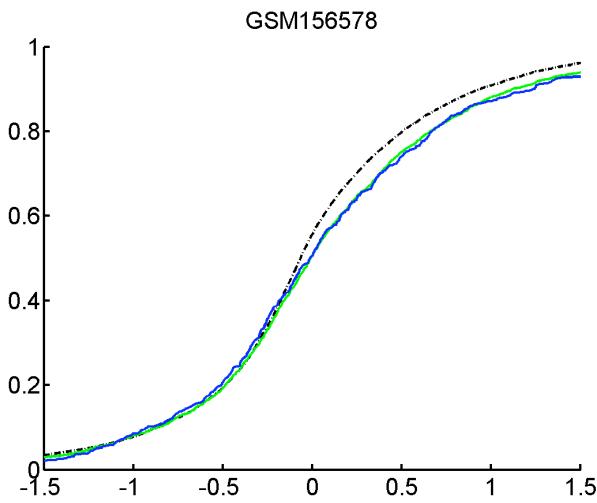
Experiment: GSM156577

mi/siRNA: miR-15a



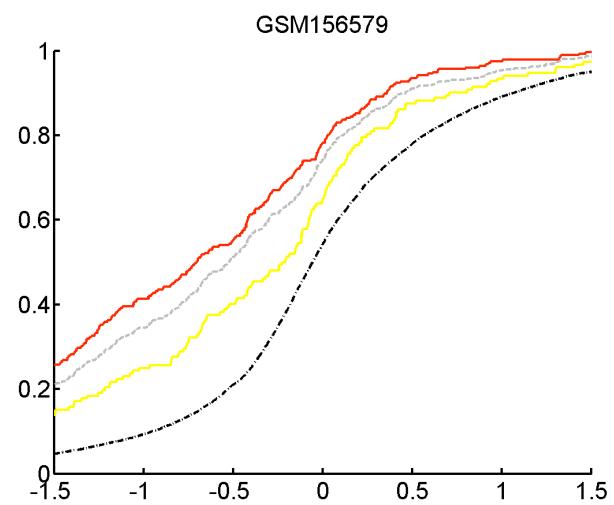
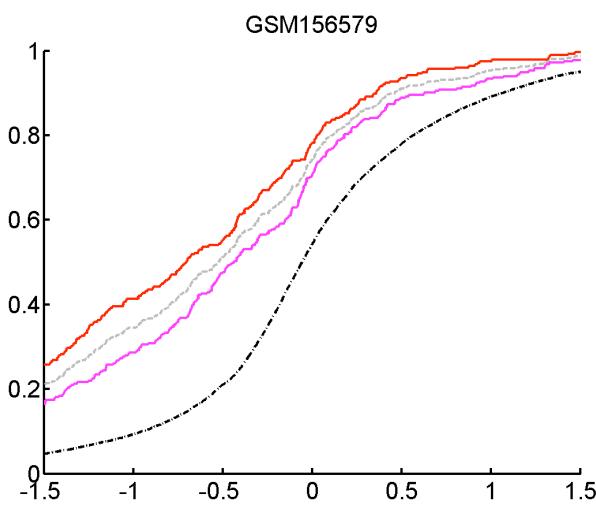
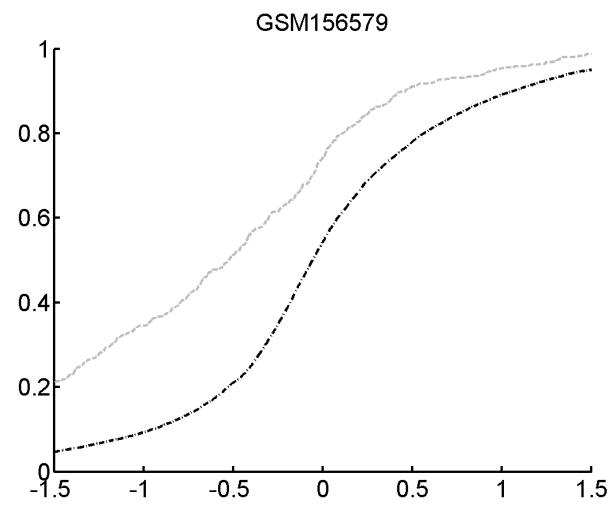
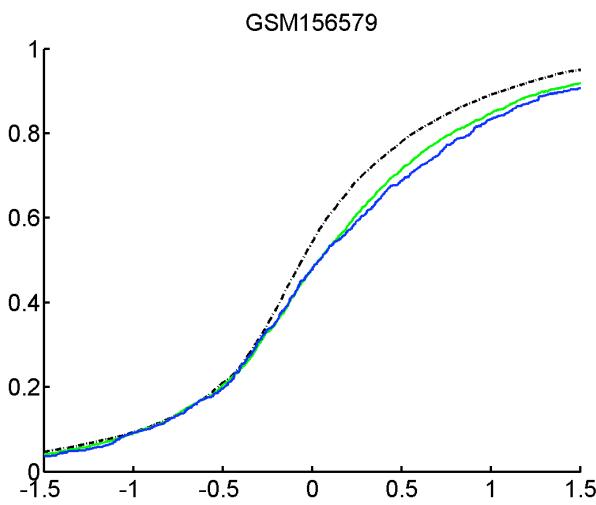
Experiment: GSM156578

mi/siRNA: miR-15b



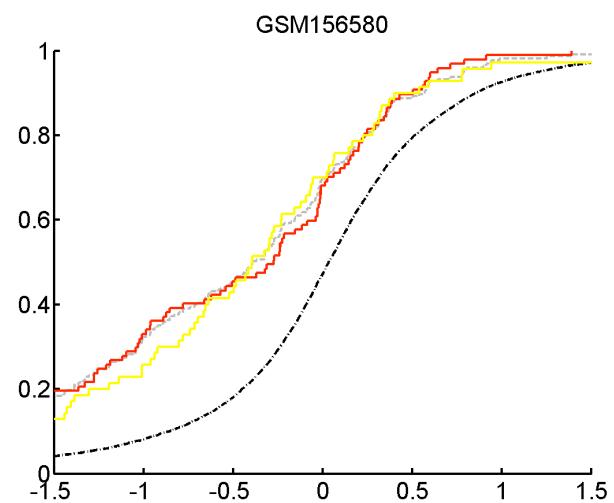
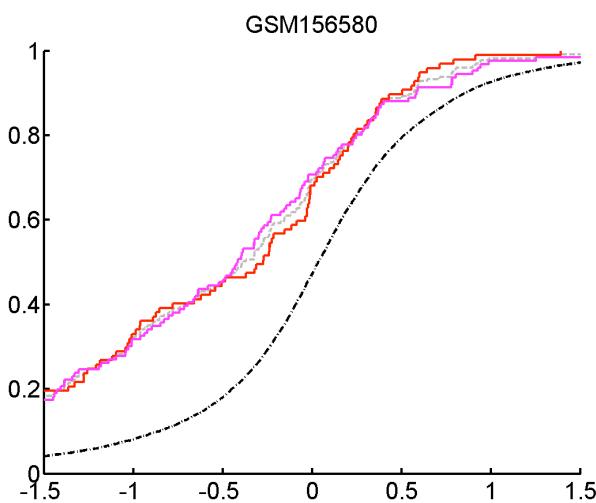
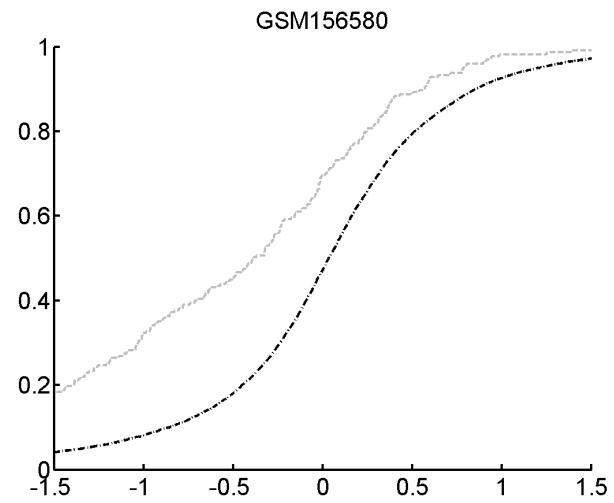
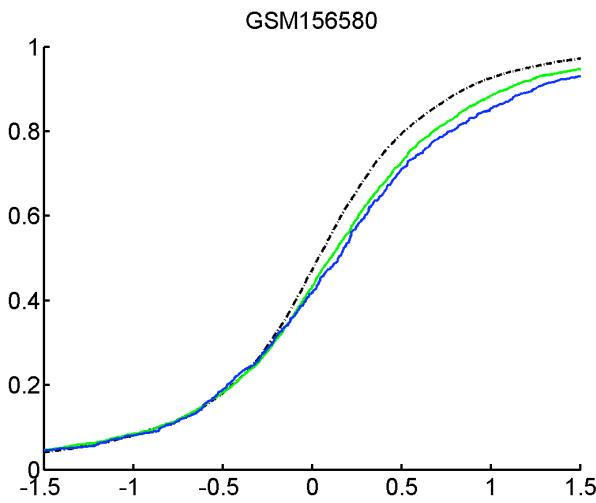
Experiment: GSM156579

mi/siRNA: miR-16



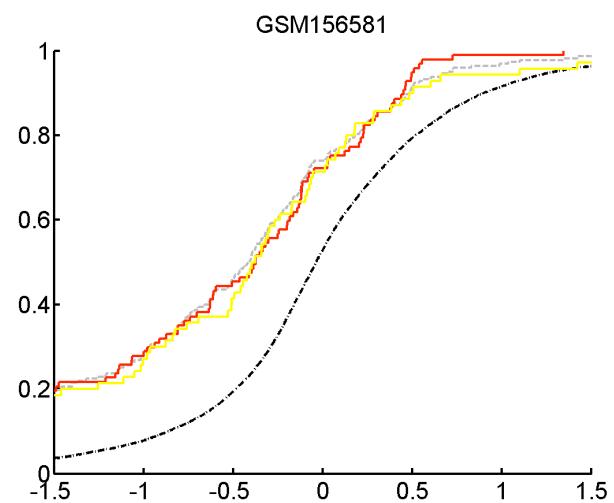
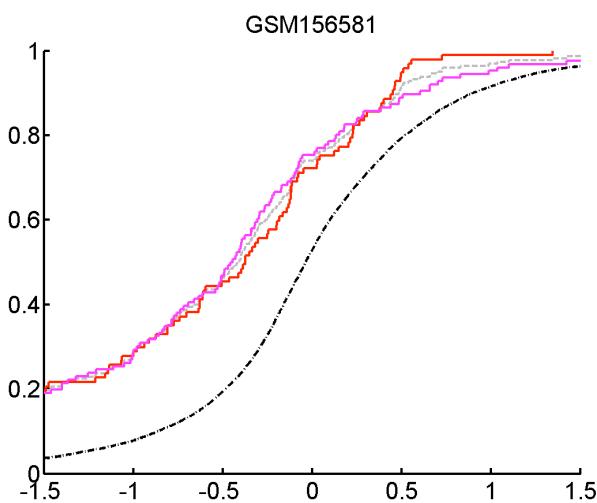
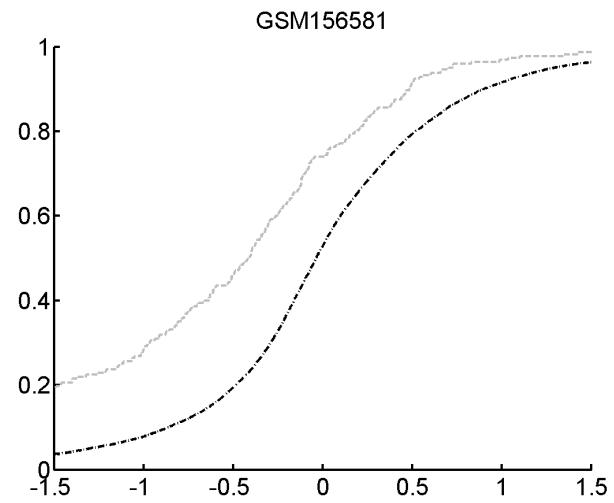
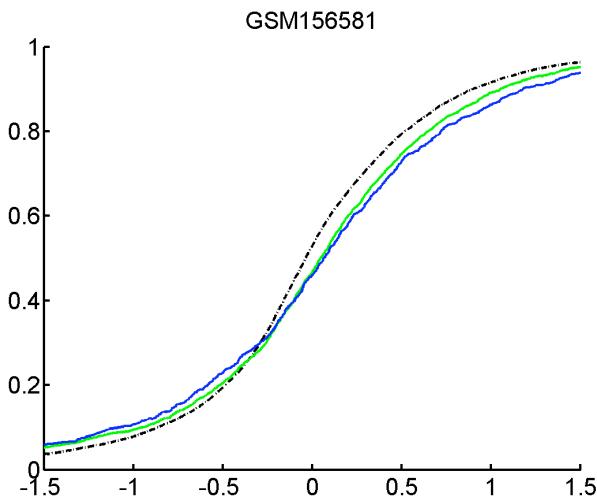
Experiment: GSM156580

mi/siRNA: miR-103



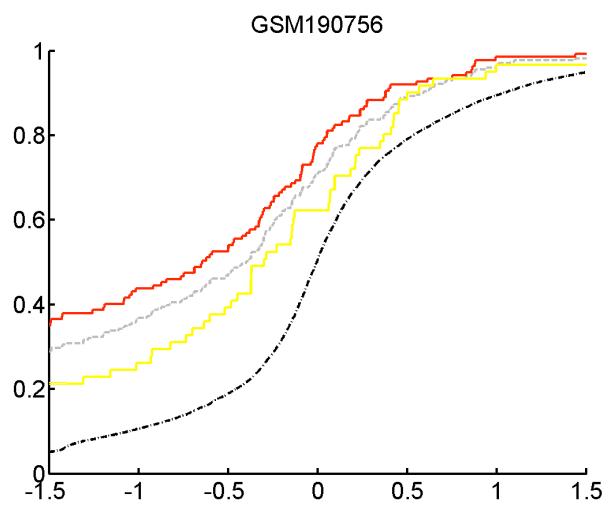
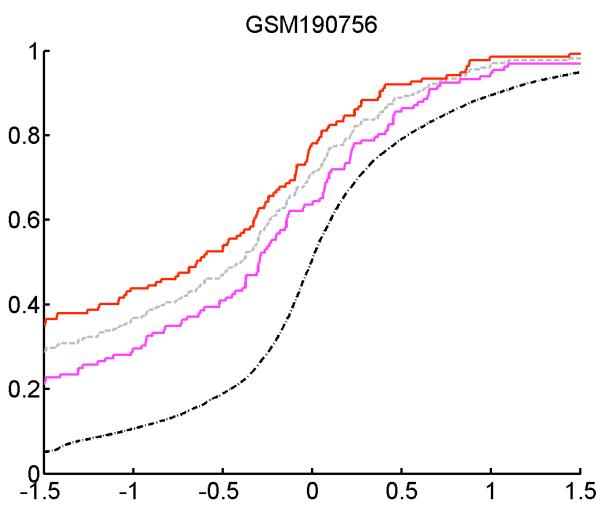
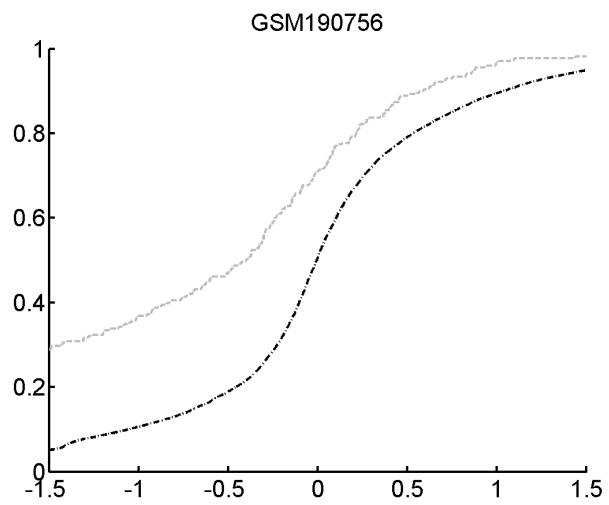
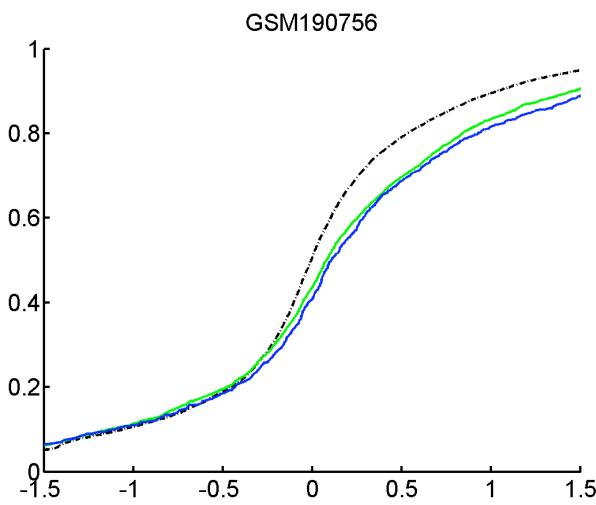
Experiment: GSM156581

mi/siRNA: miR-107



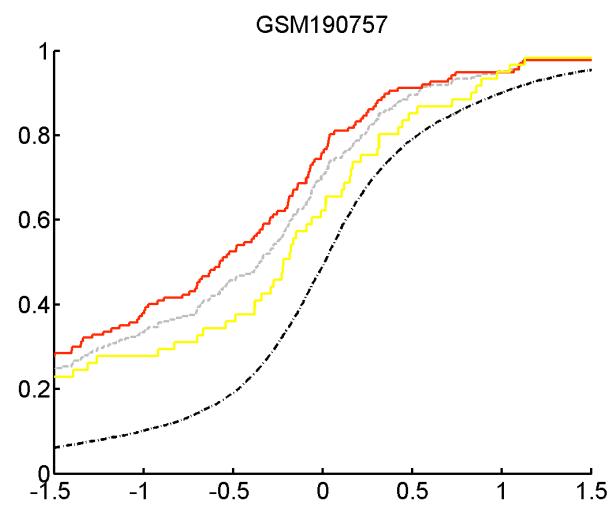
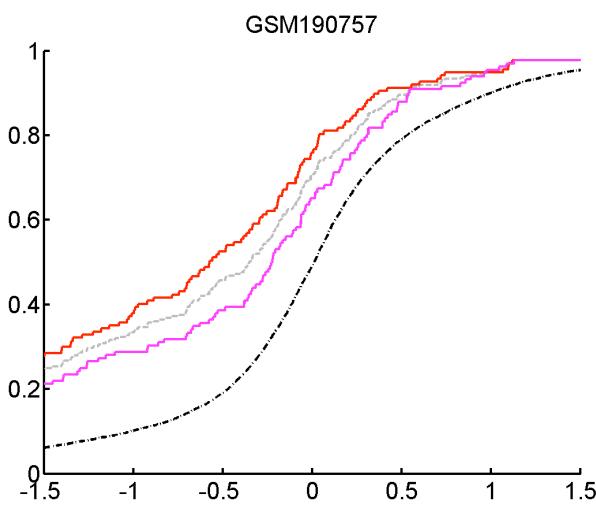
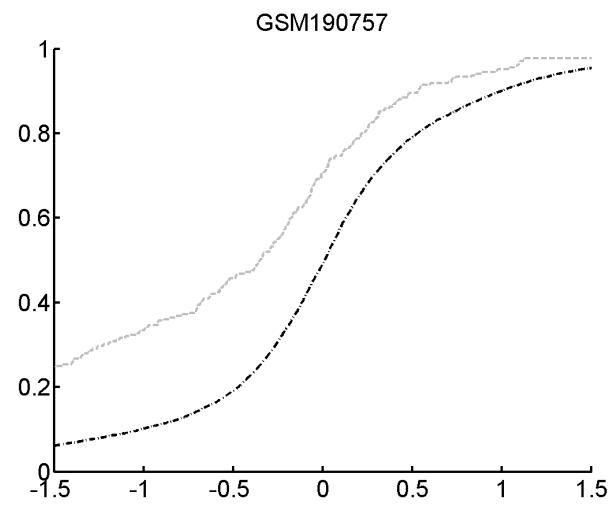
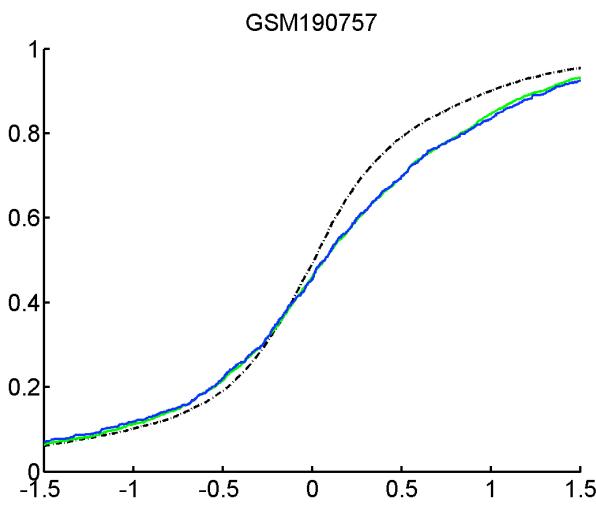
Experiment: GSM190756

mi/siRNA: miR-34a



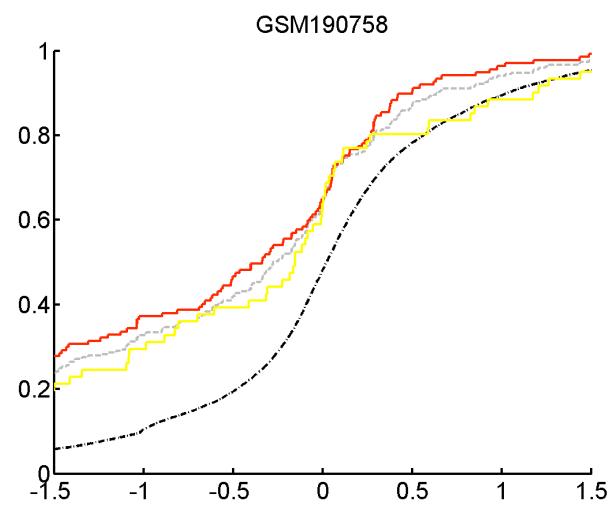
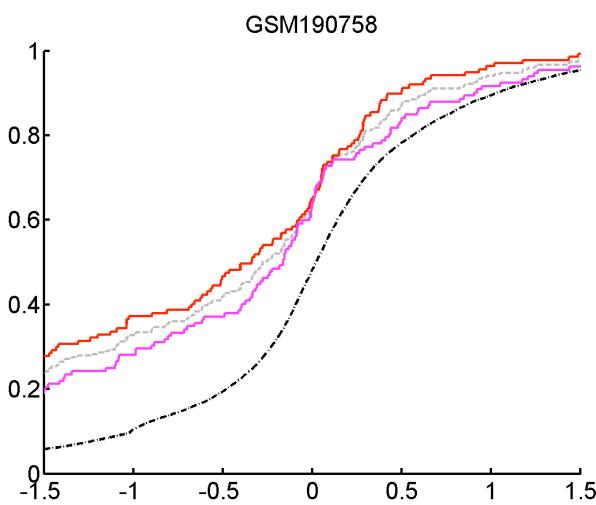
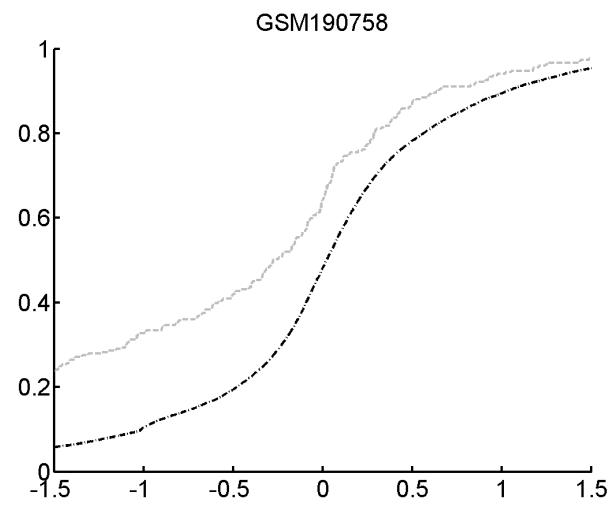
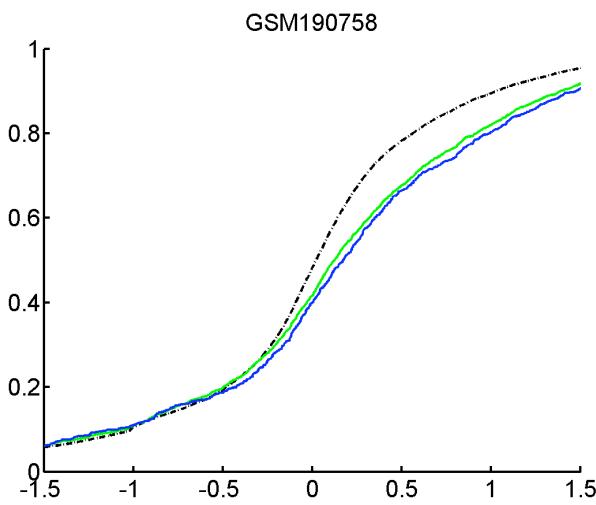
Experiment: GSM190757

mi/siRNA: miR-34b



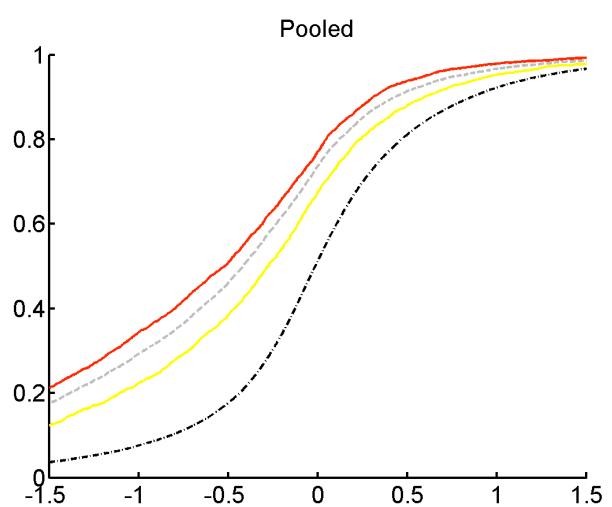
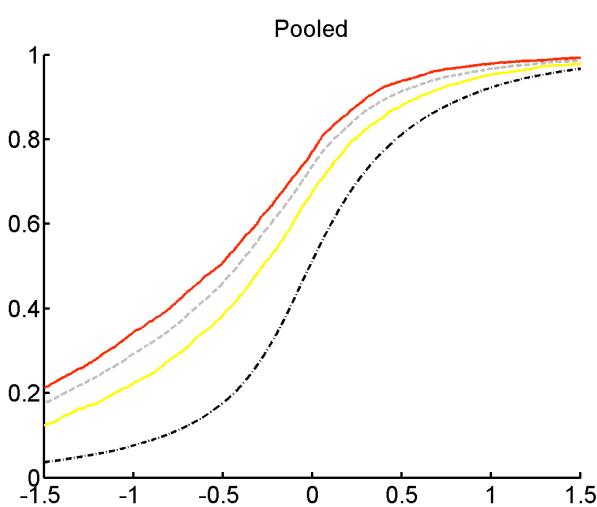
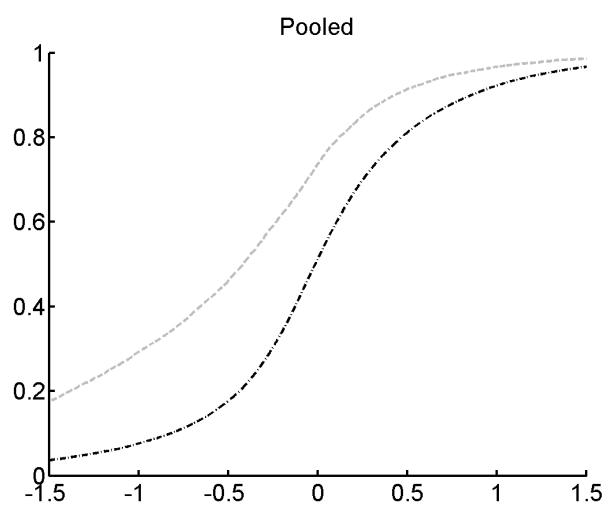
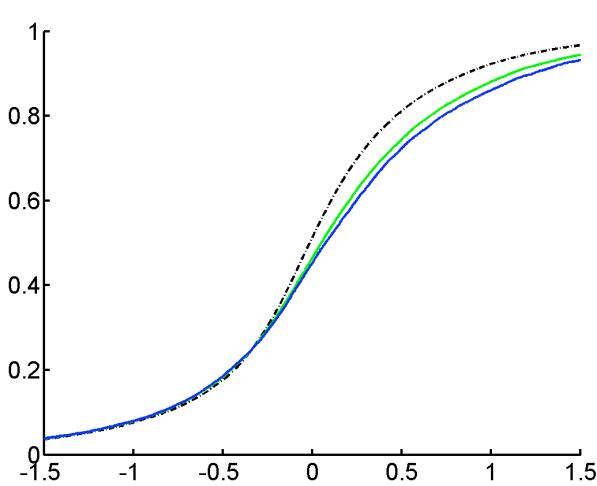
Experiment: GSM190758

mi/siRNA: miR-34c



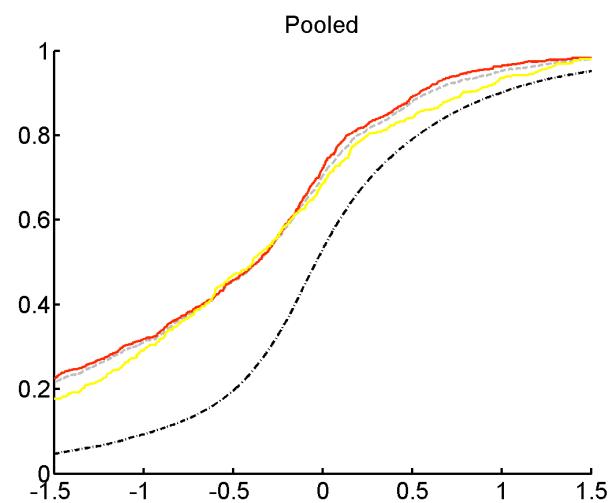
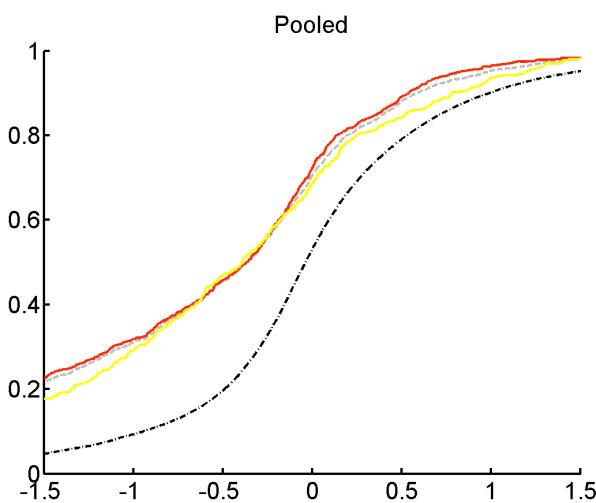
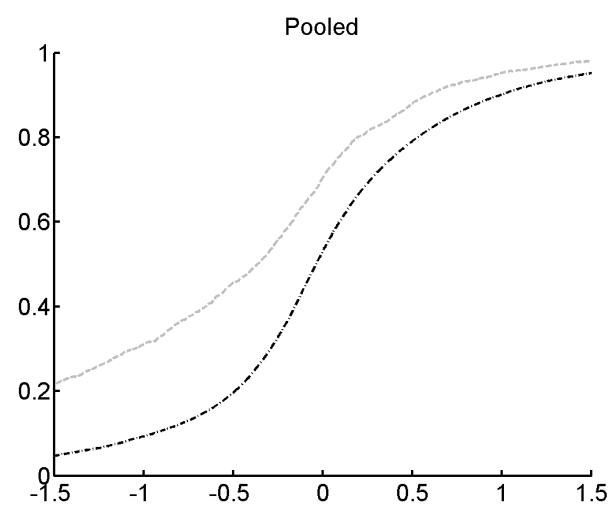
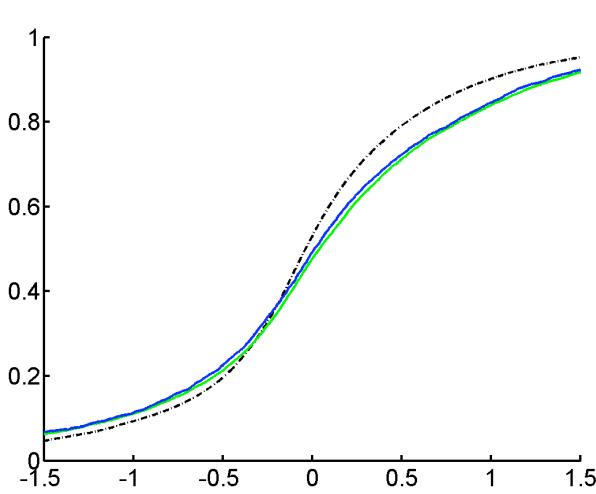
Experiment: hct116-dko

mi/siRNA: pooled



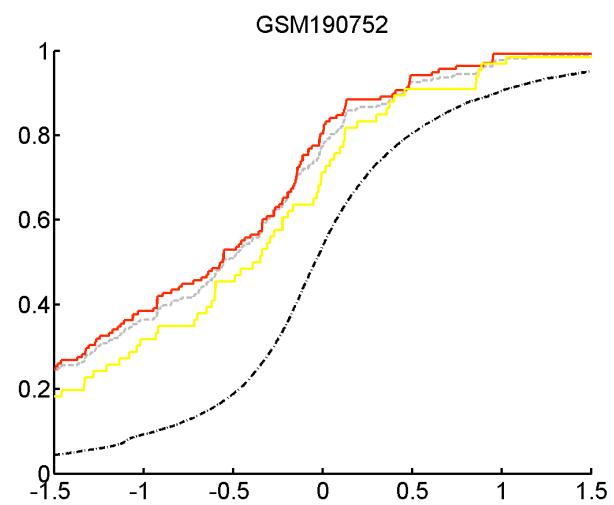
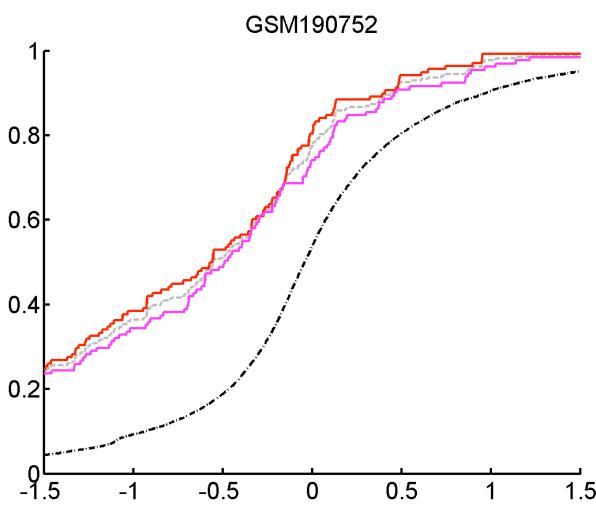
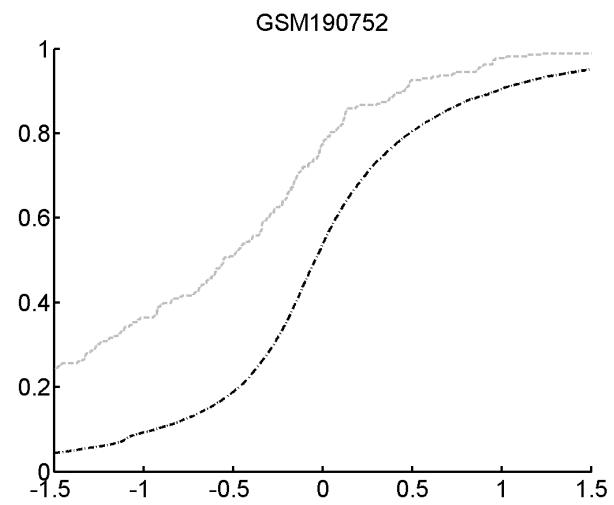
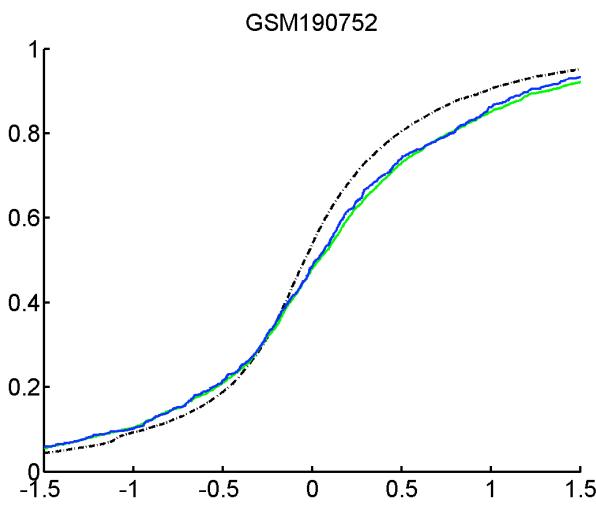
Experiment: A549

mi/siRNA: pooled



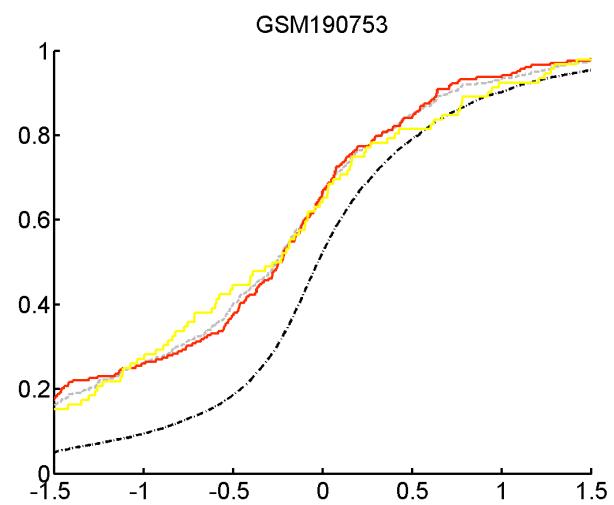
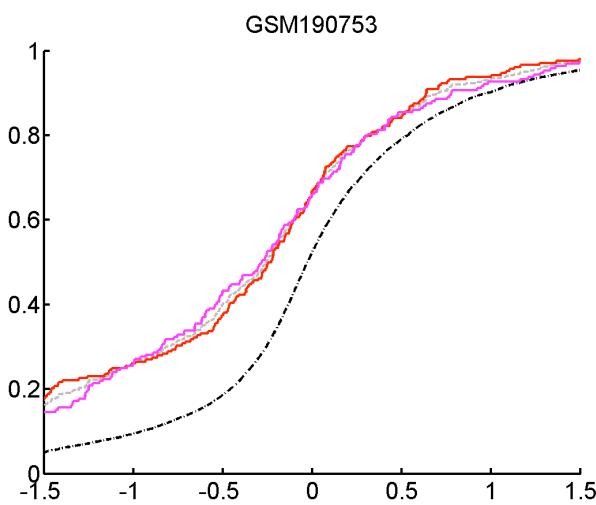
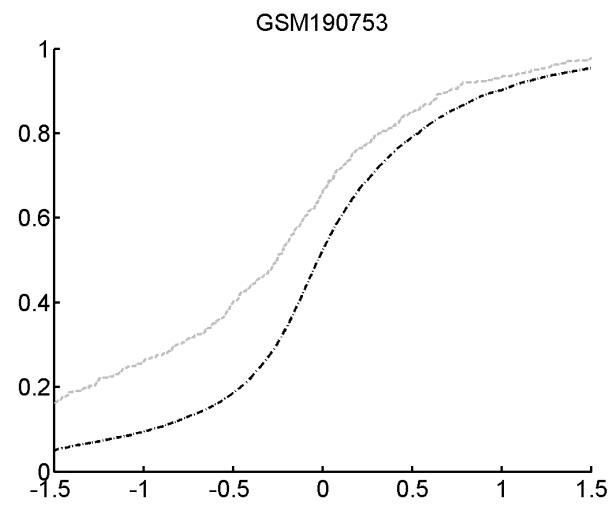
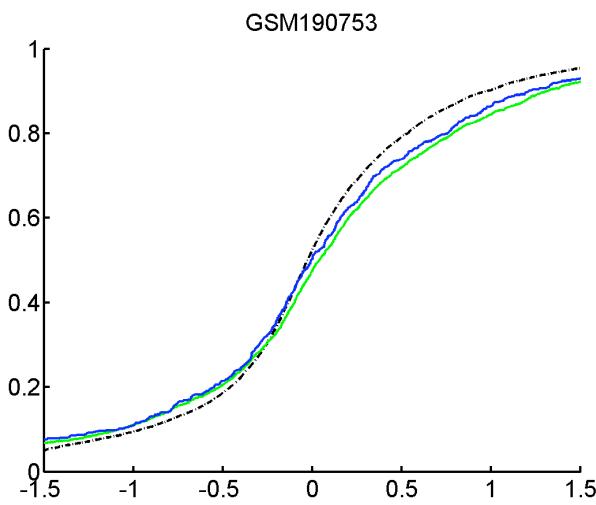
Experiment: GSM190752

mi/siRNA: miR-34a



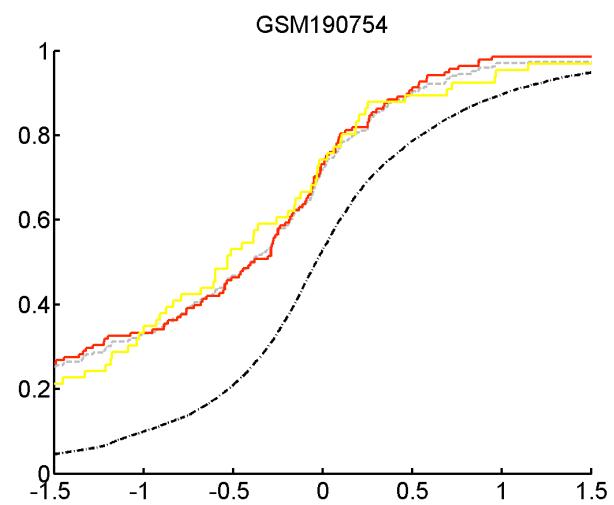
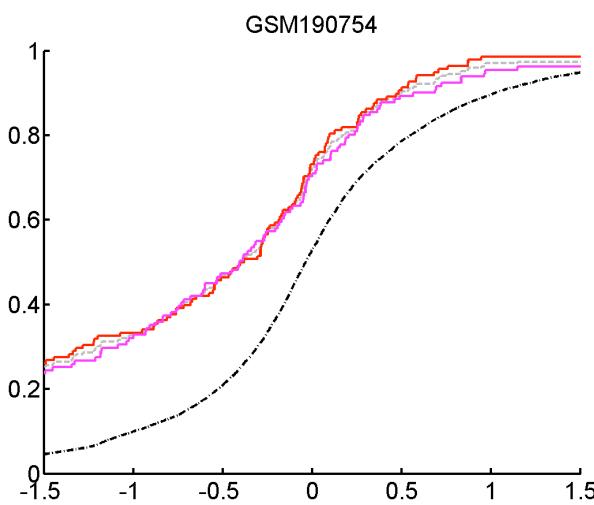
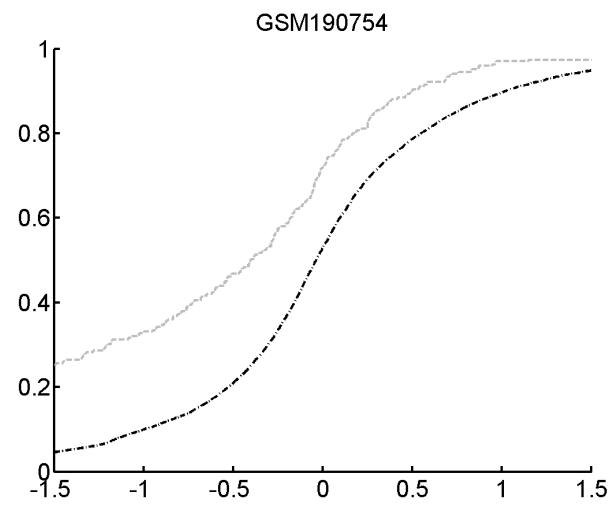
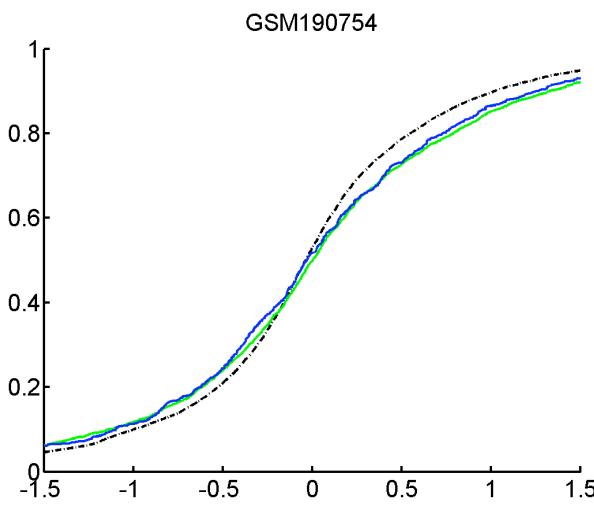
Experiment: GSM190753

mi/siRNA: miR-34b



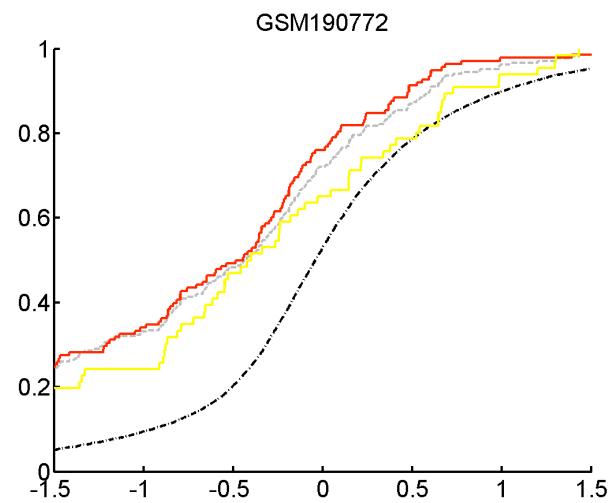
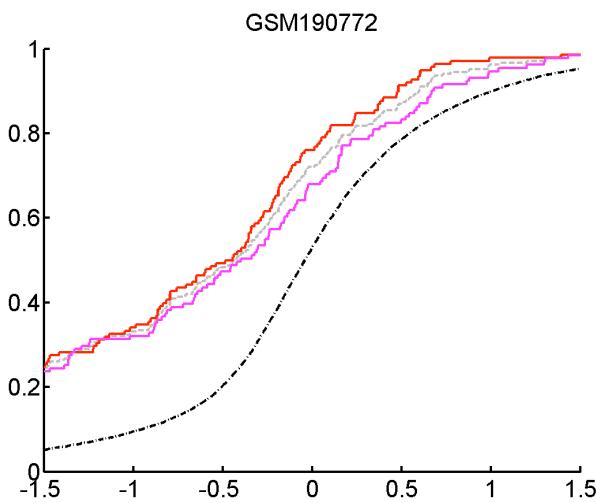
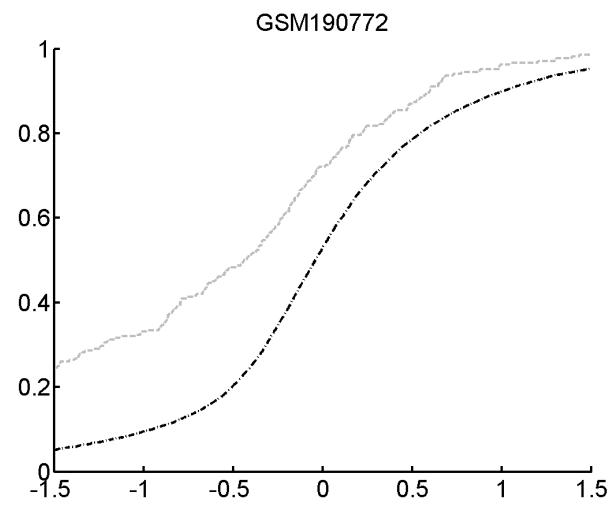
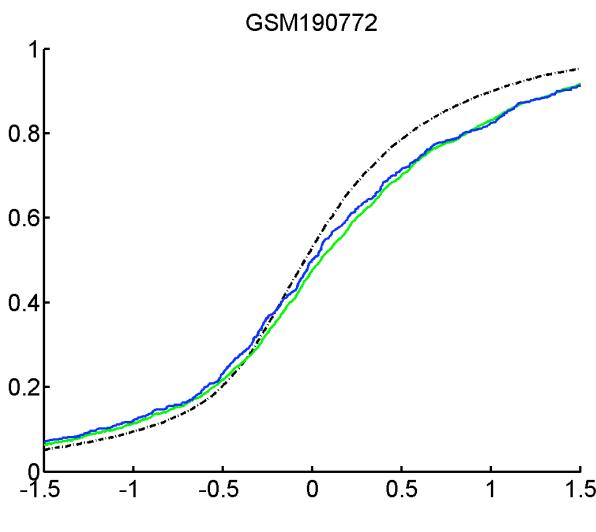
Experiment: GSM190754

mi/siRNA: miR-34c



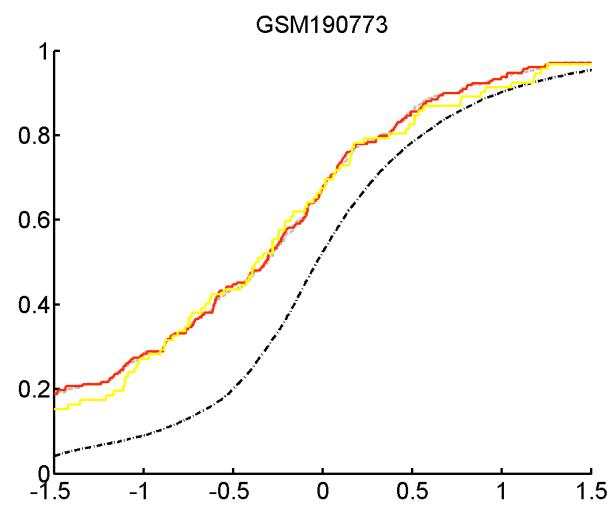
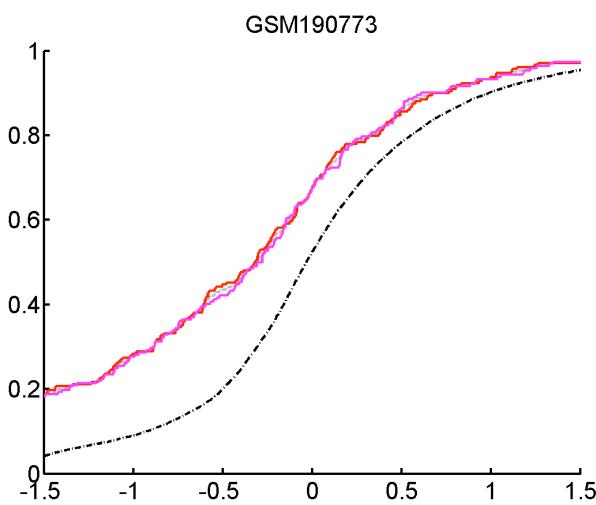
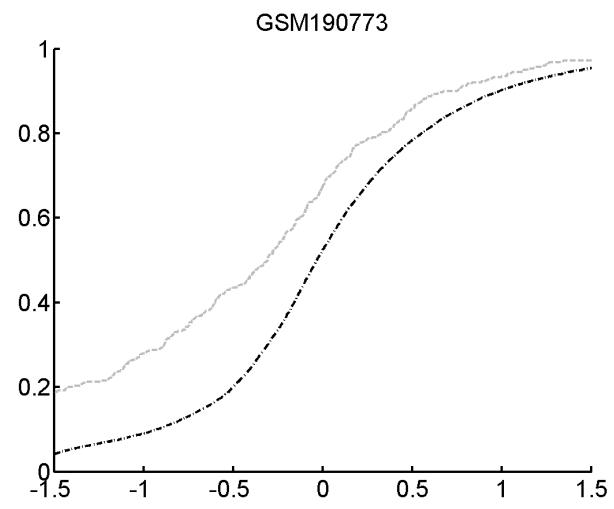
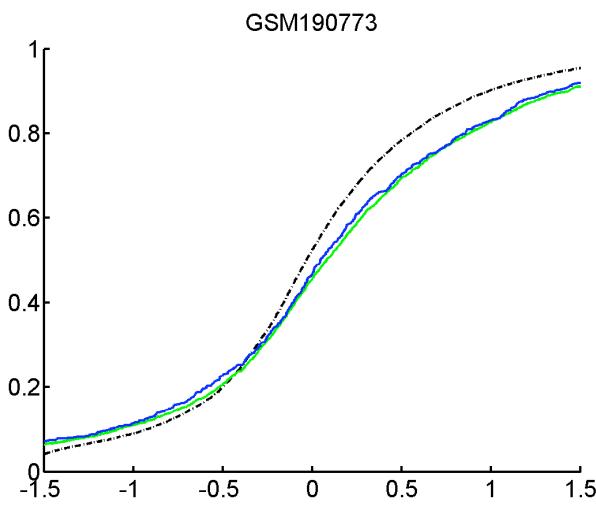
Experiment: GSM190772

mi/siRNA: miR-34a+p53-1026



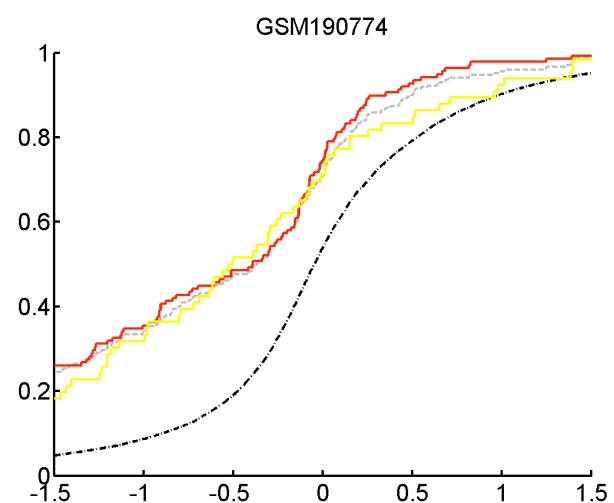
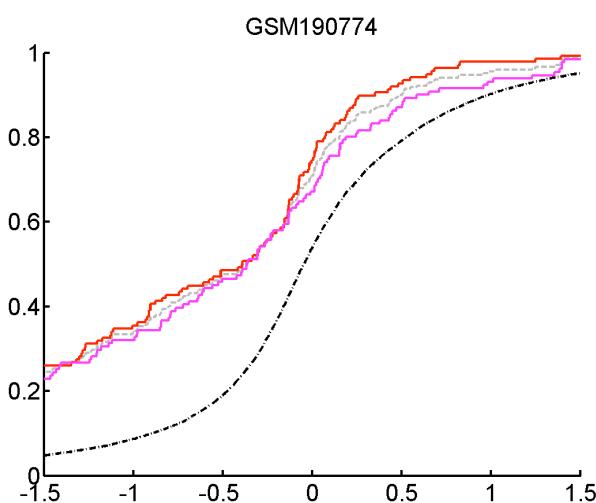
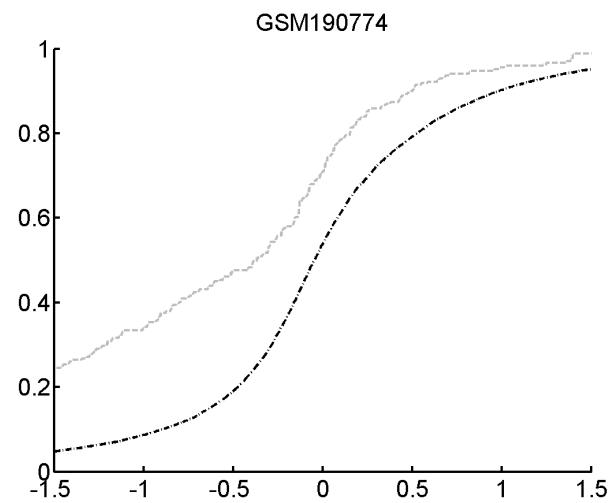
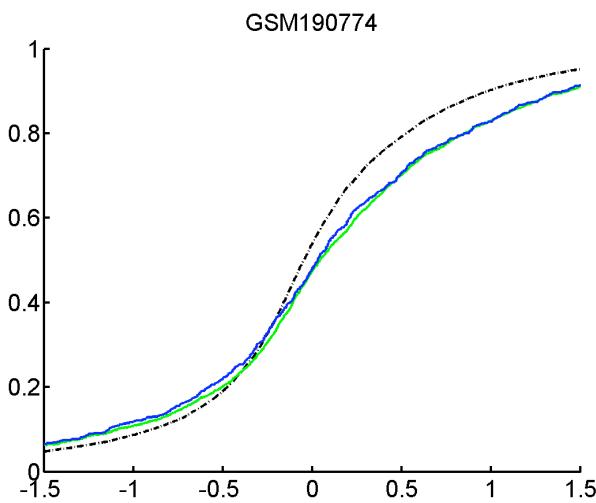
Experiment: GSM190773

mi/siRNA: miR-34b+p53-1026



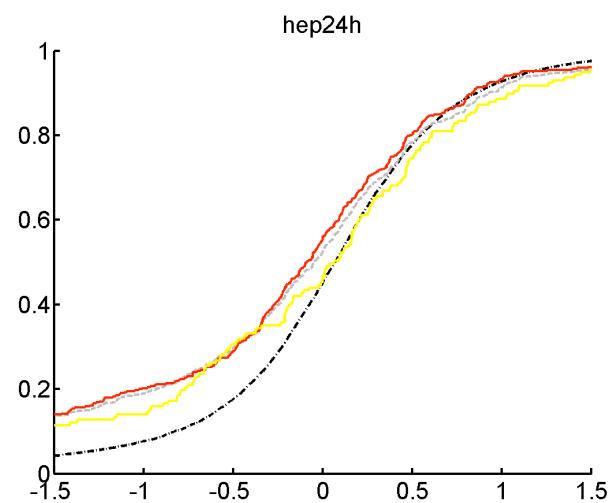
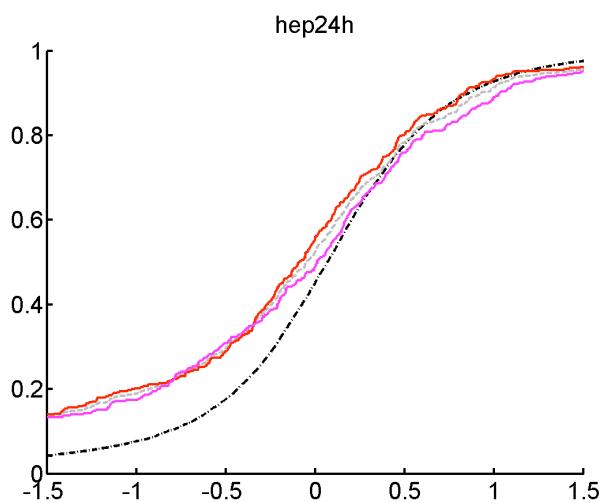
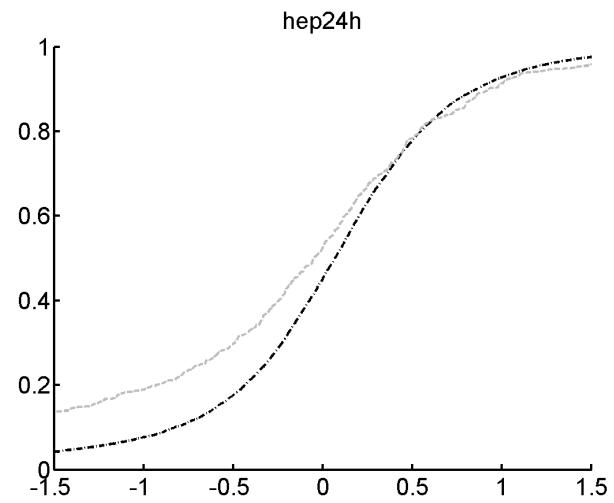
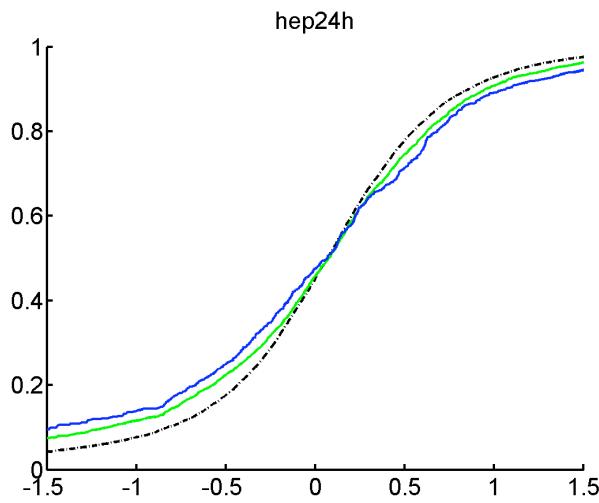
Experiment: GSM190774

mi/siRNA: miR-34c+p53-1026



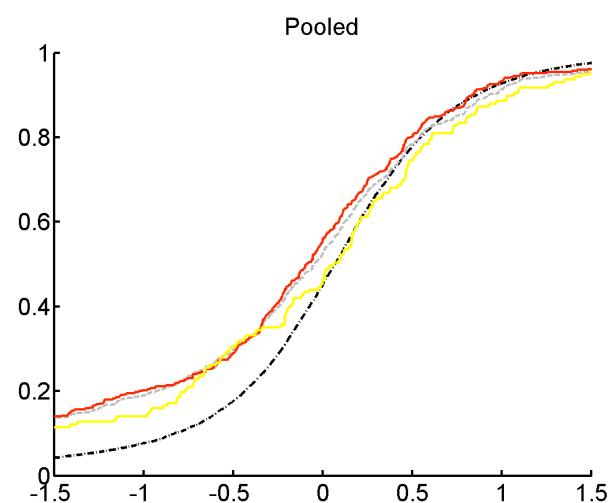
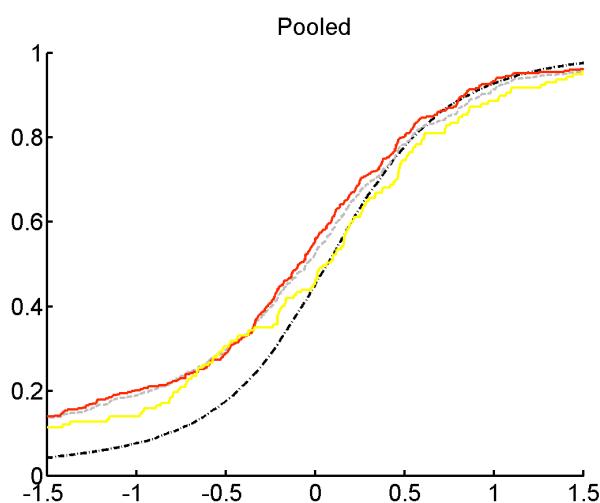
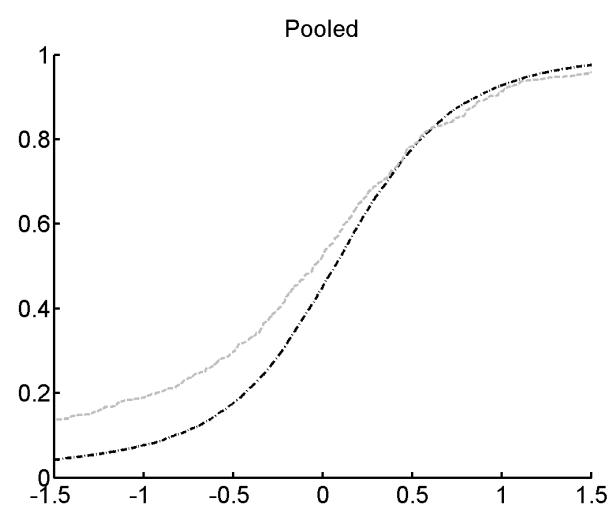
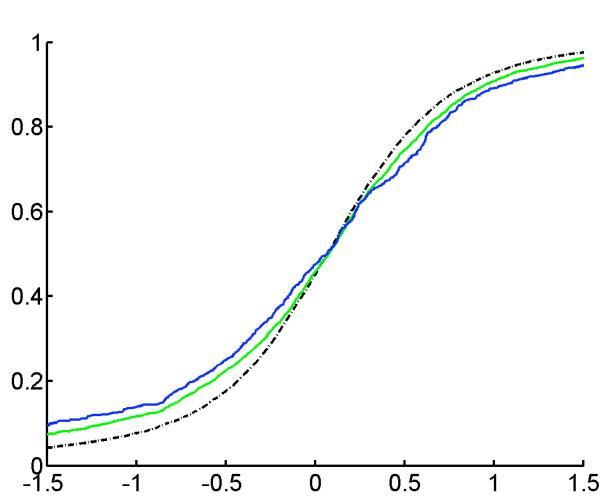
Experiment: hep24h

mi/siRNA: miR-124



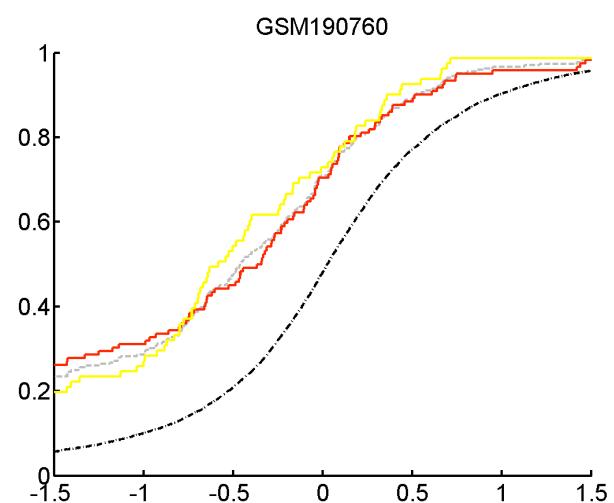
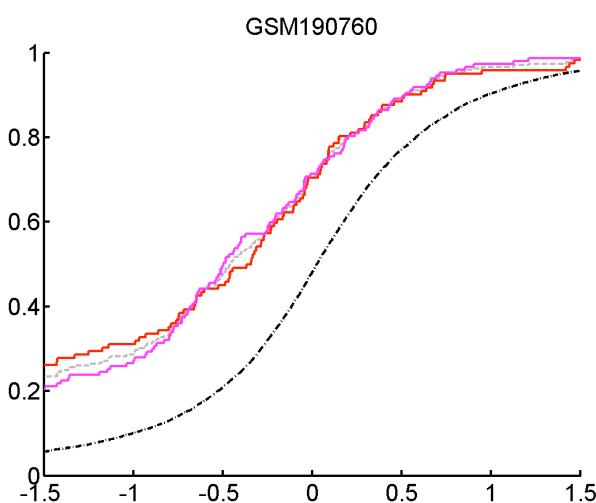
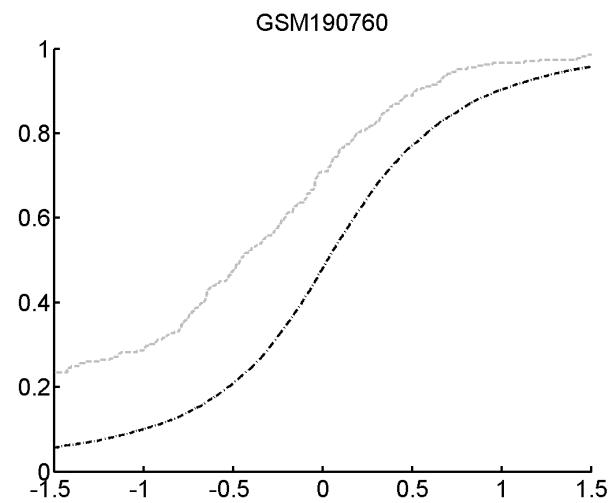
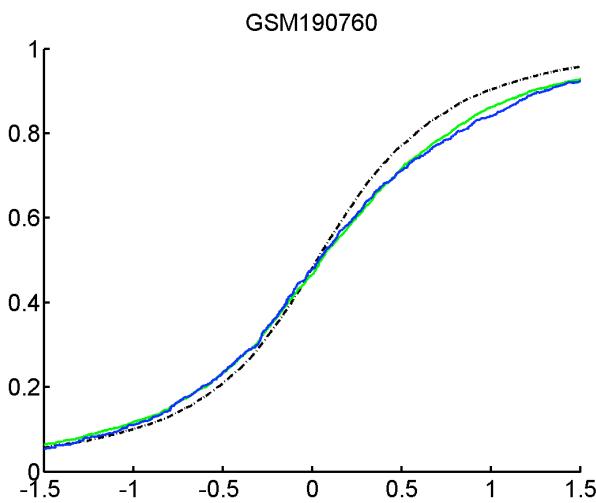
Experiment: HepG2

mi/siRNA: pooled



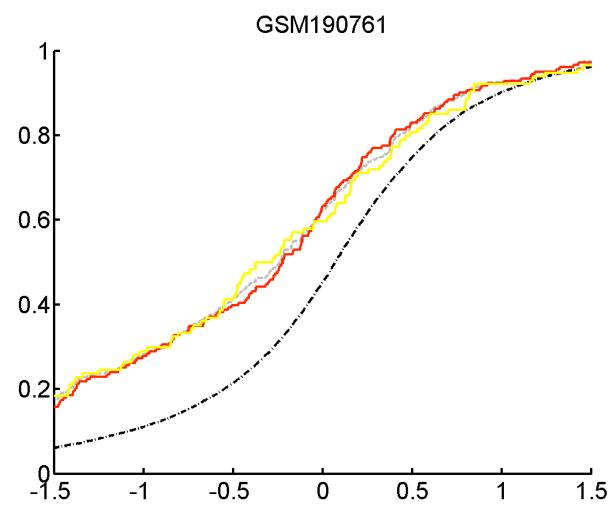
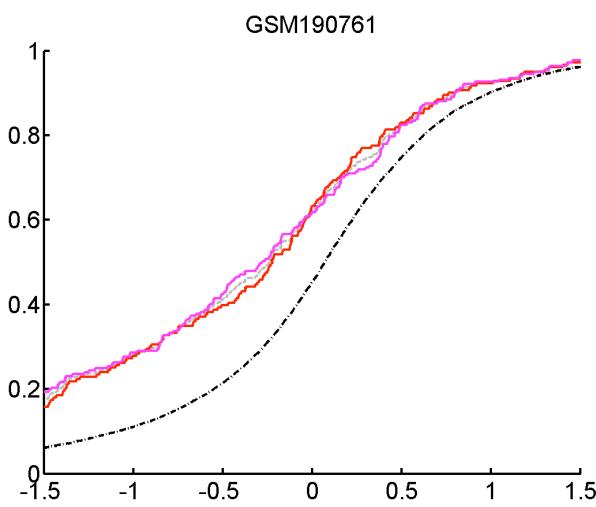
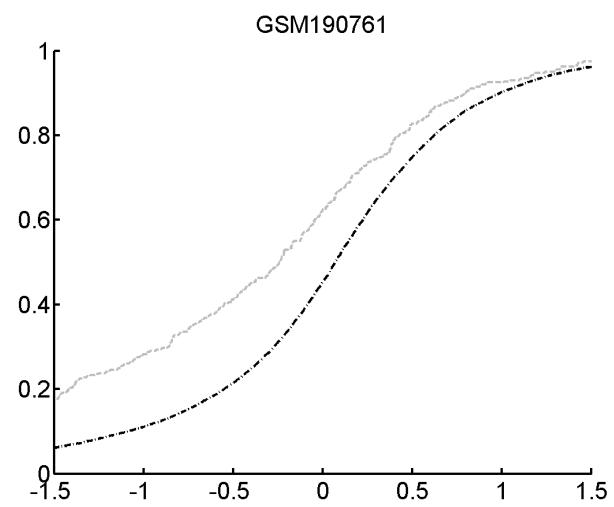
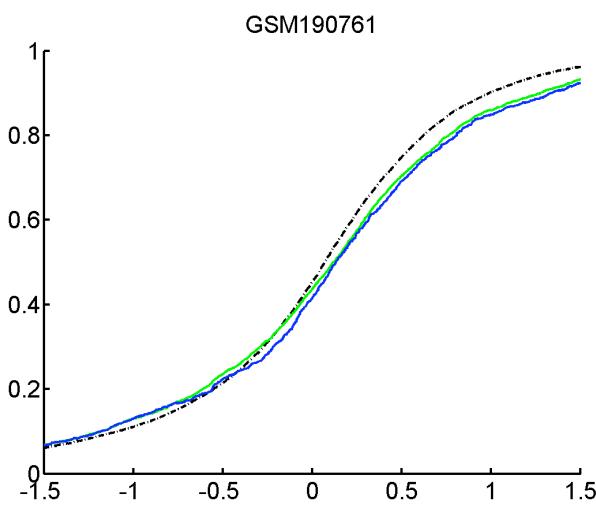
Experiment: GSM190760

mi/siRNA: miR-34a



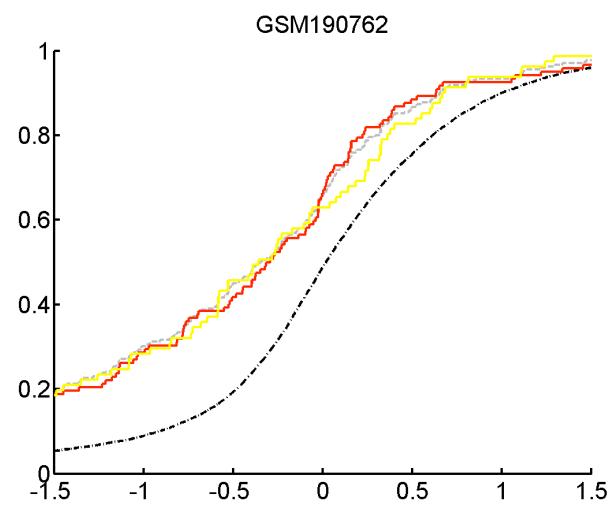
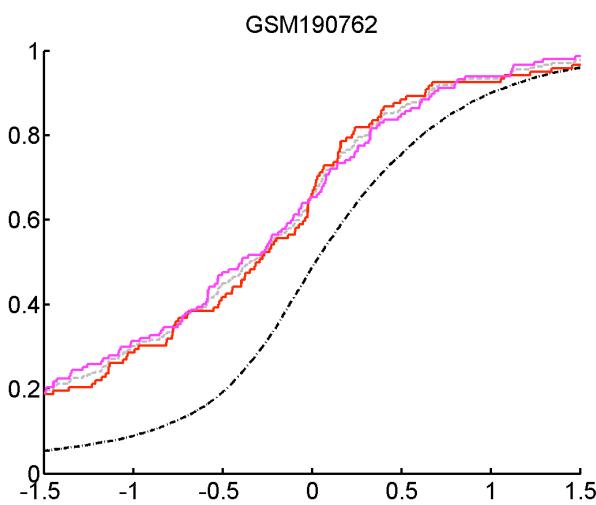
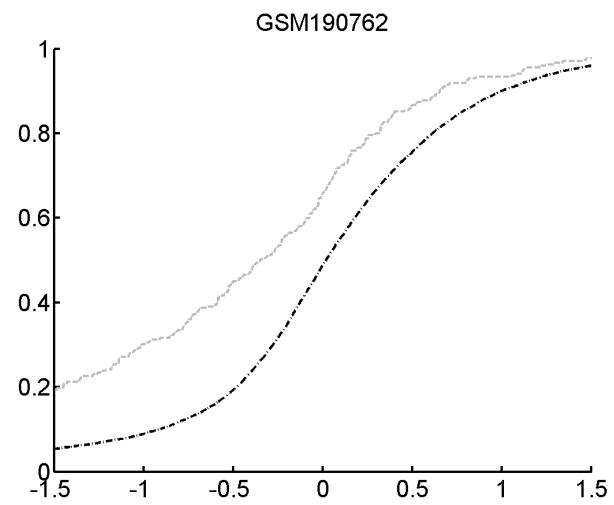
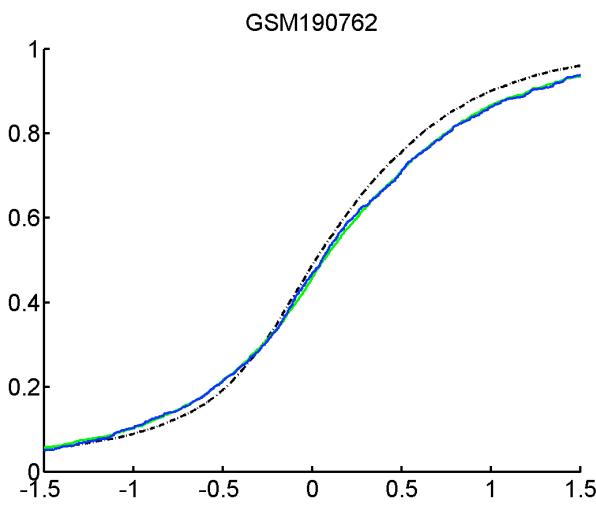
Experiment: GSM190761

mi/siRNA: miR-34b



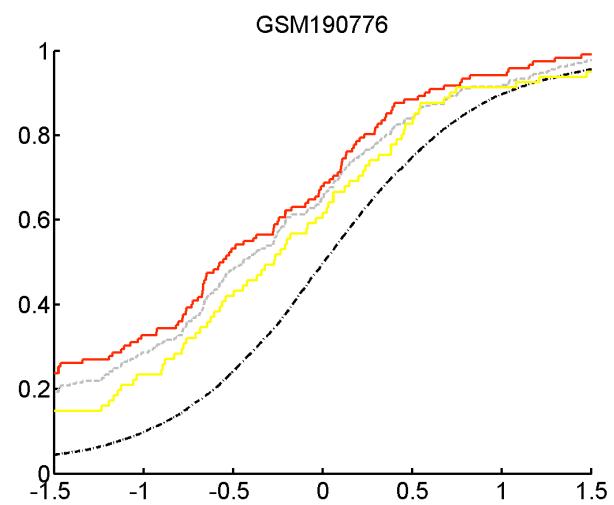
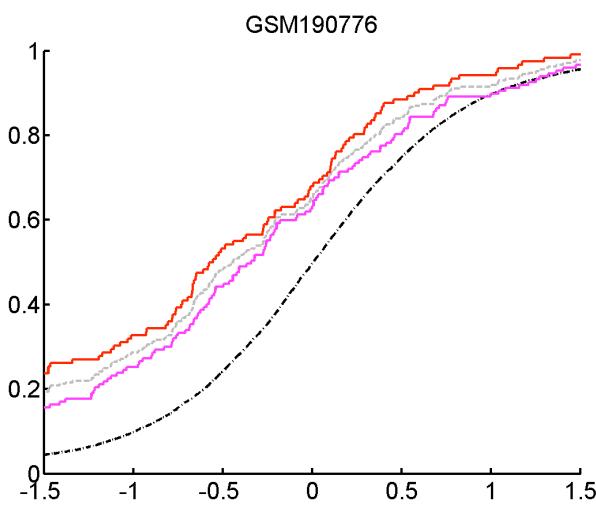
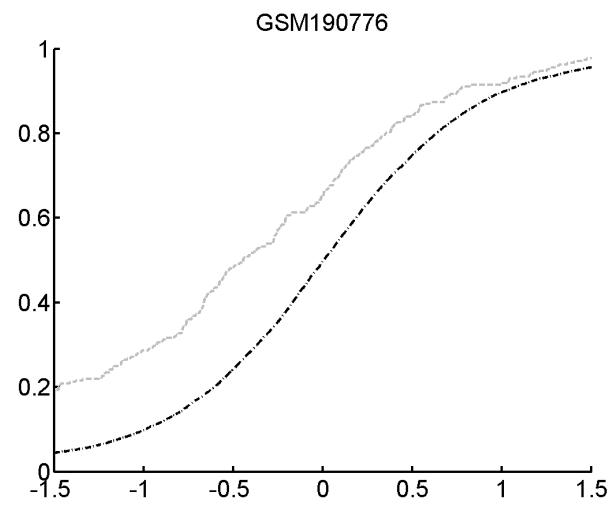
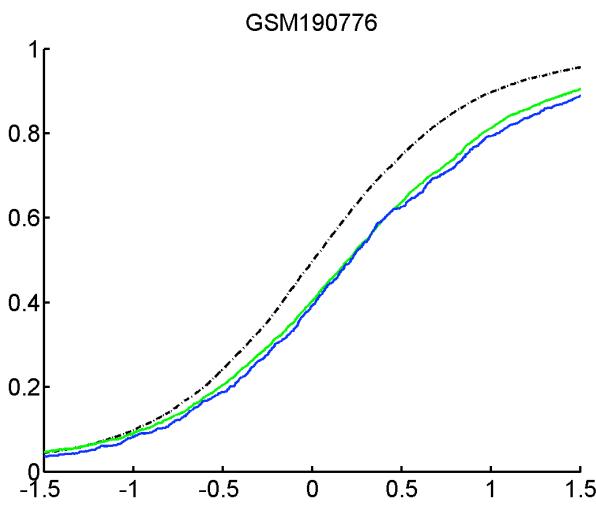
Experiment: GSM190762

mi/siRNA: miR-34c



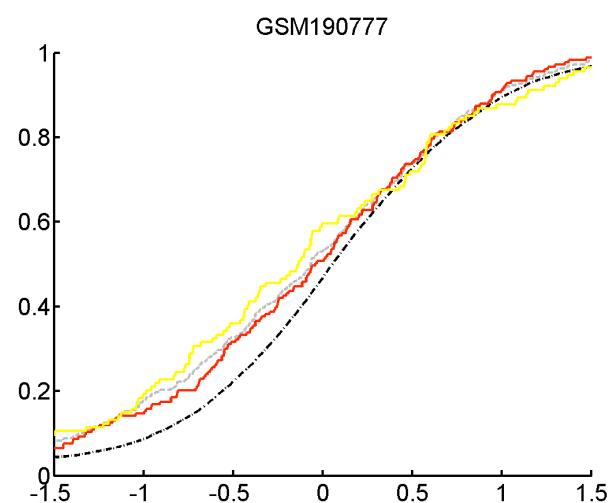
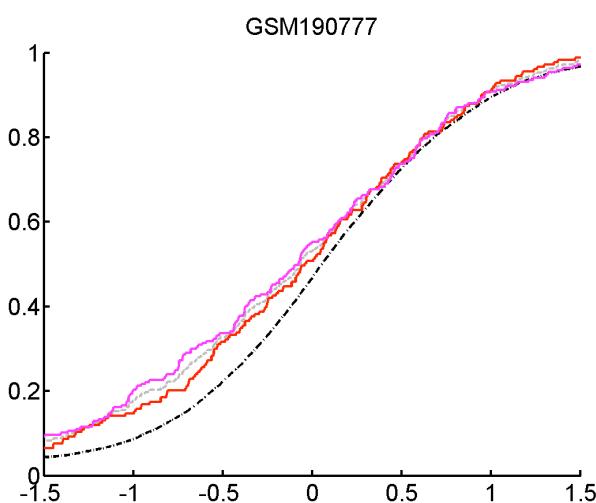
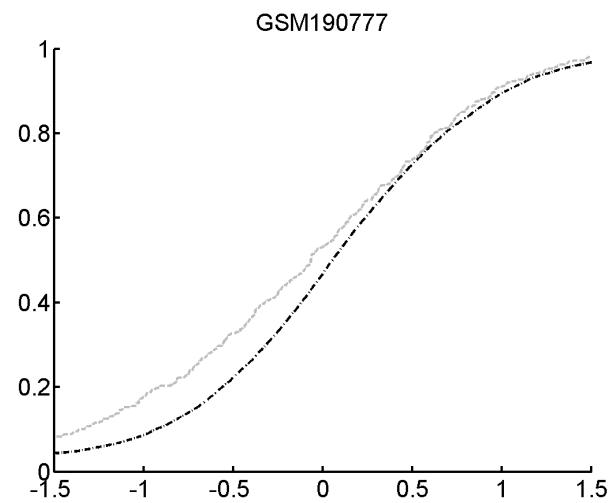
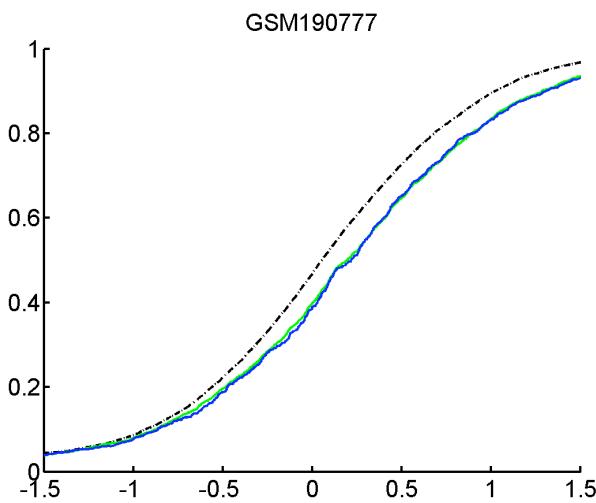
Experiment: GSM190776

mi/siRNA: miR-34a+-p53-1026



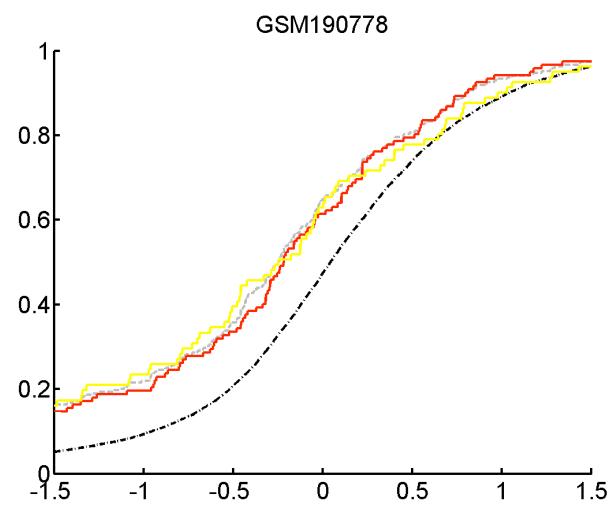
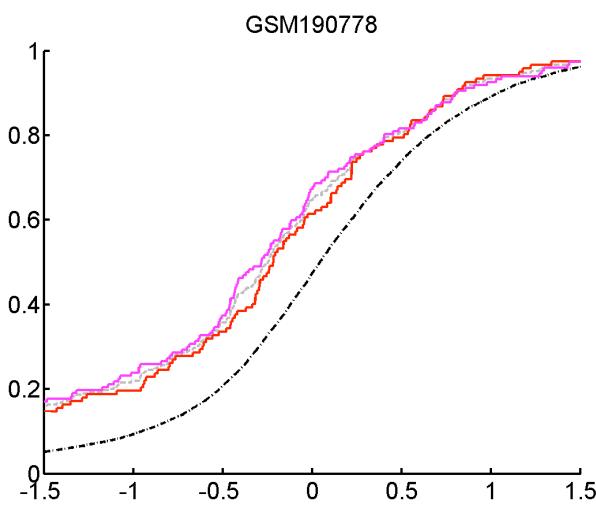
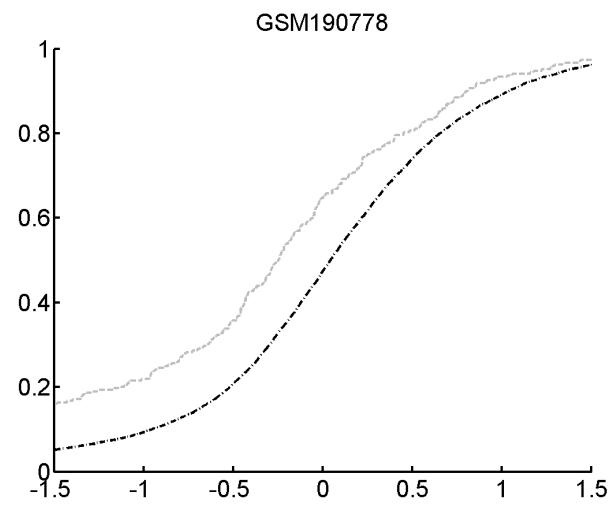
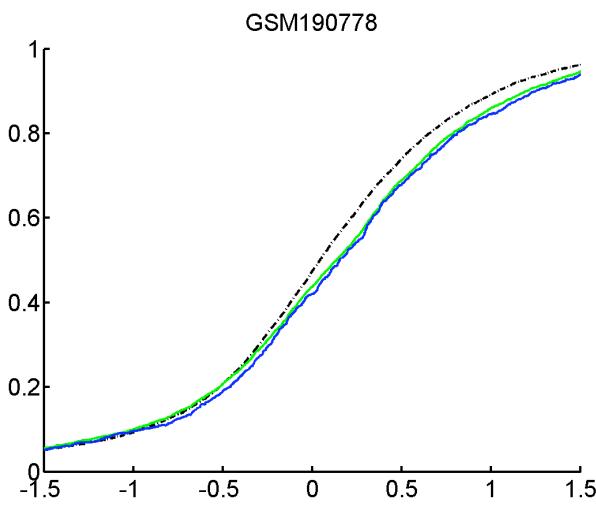
Experiment: GSM190777

mi/siRNA: miR-34b+-p53-1026



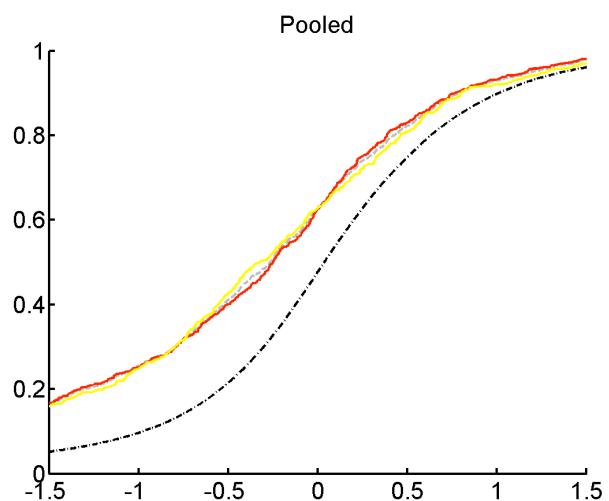
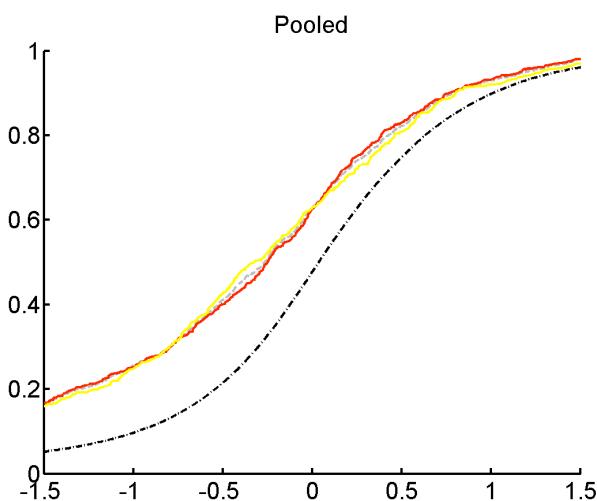
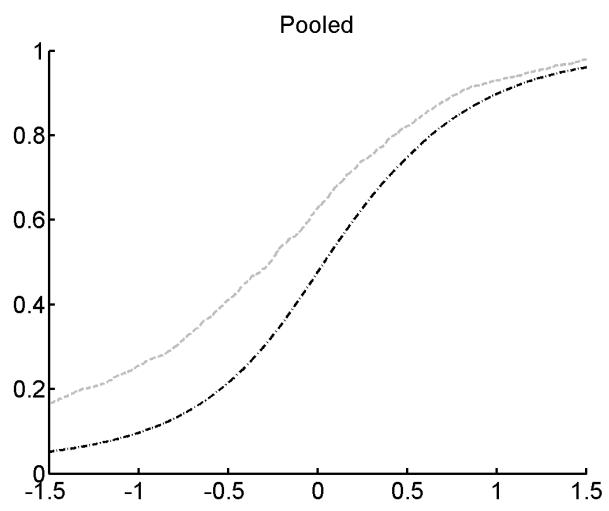
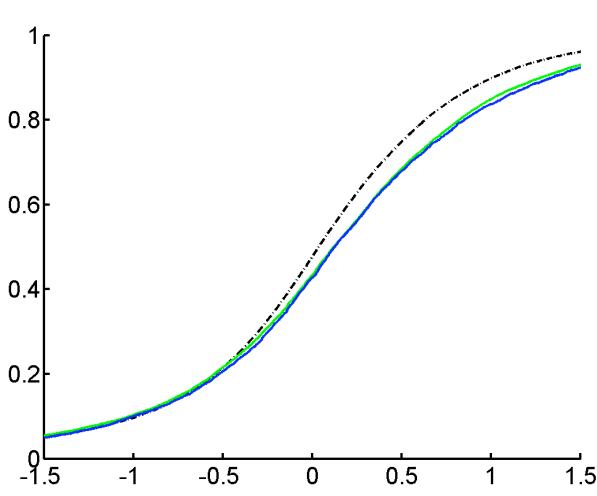
Experiment: GSM190778

mi/siRNA: miR-34c+-p53-1026



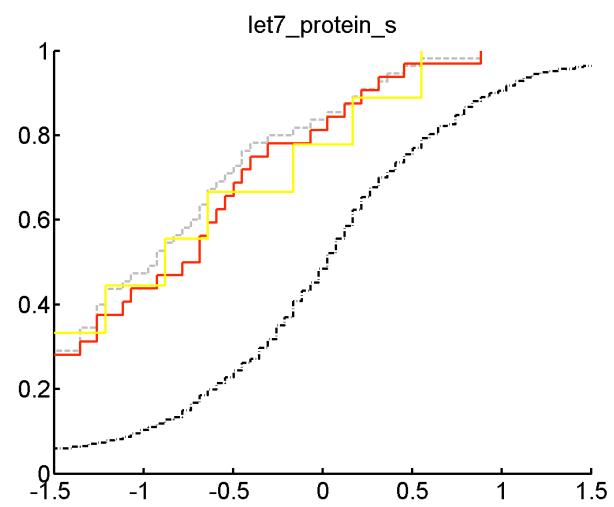
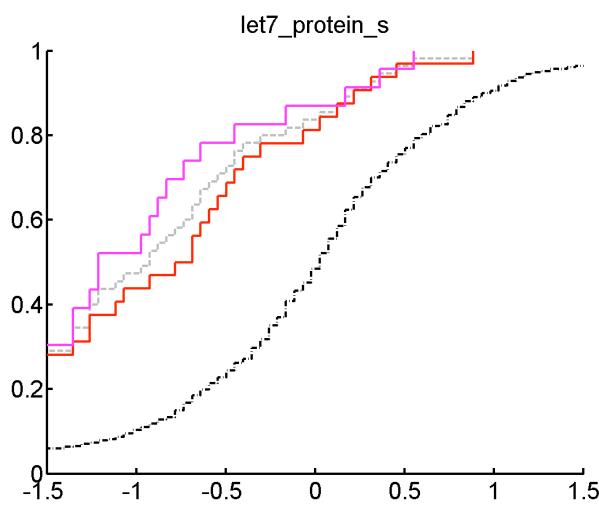
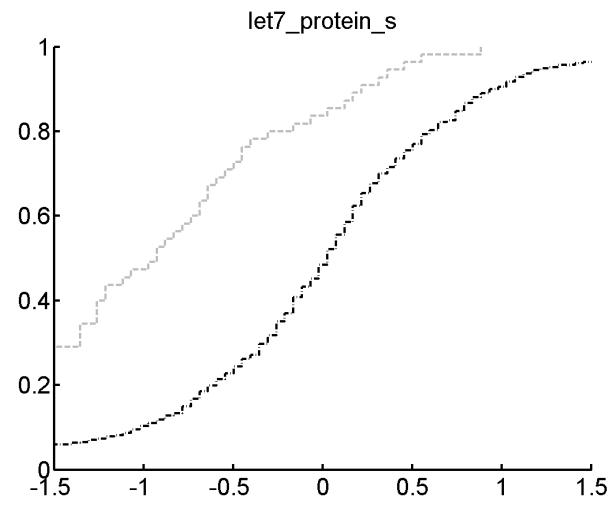
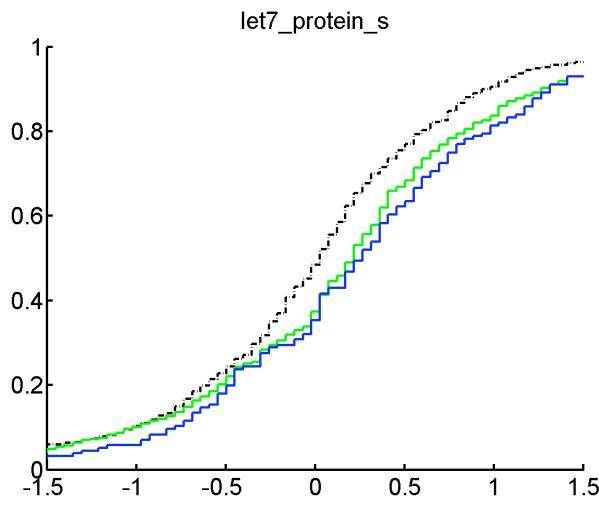
Experiment: TOV21G

mi/siRNA: pooled



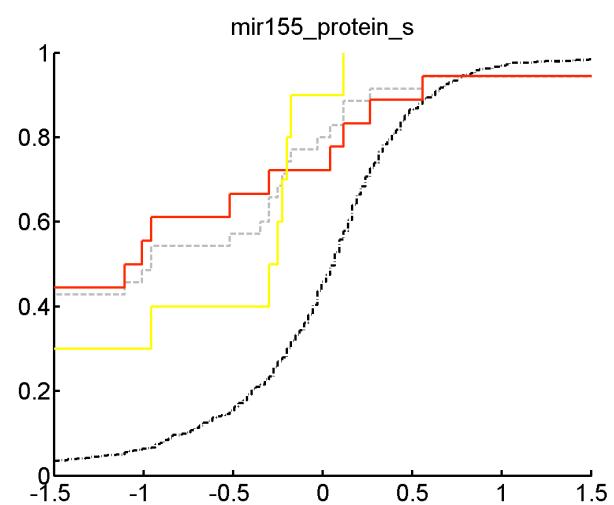
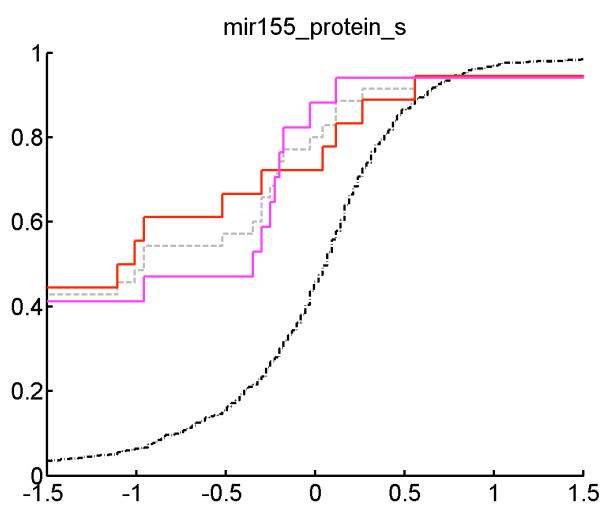
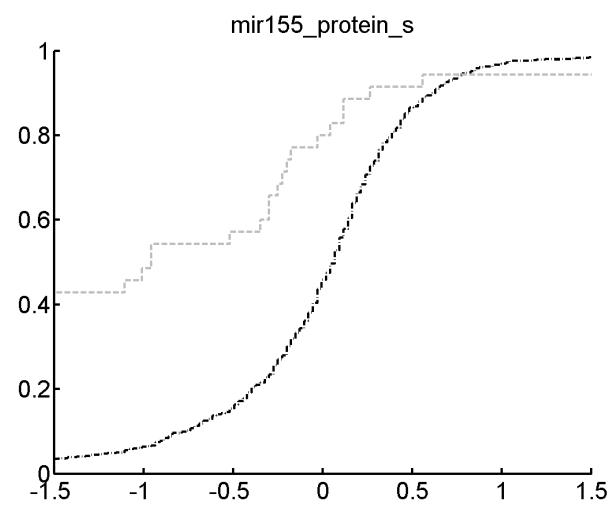
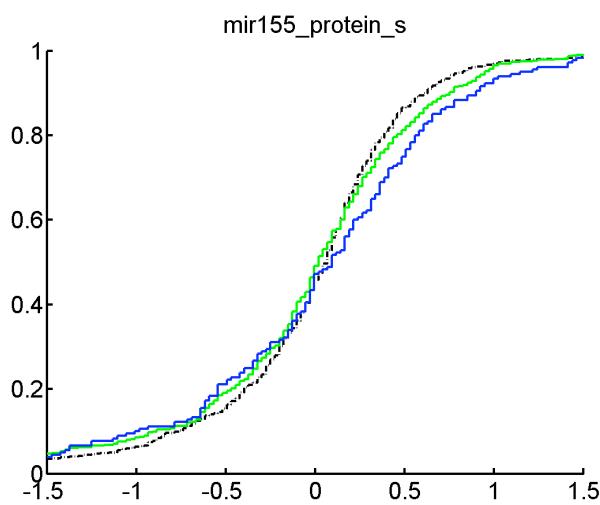
Experiment: let7-protein-s

mi/siRNA: let-7b



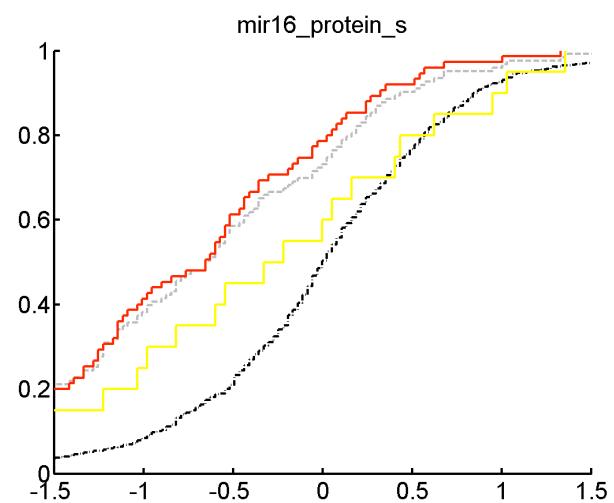
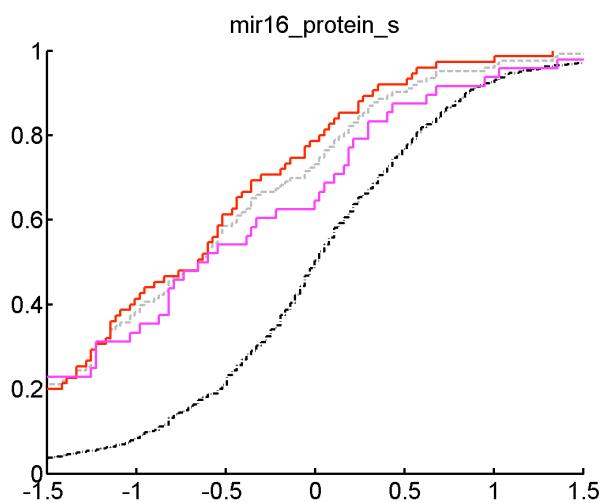
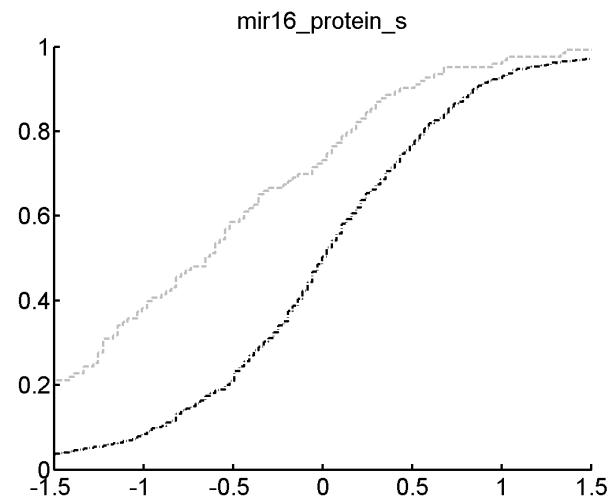
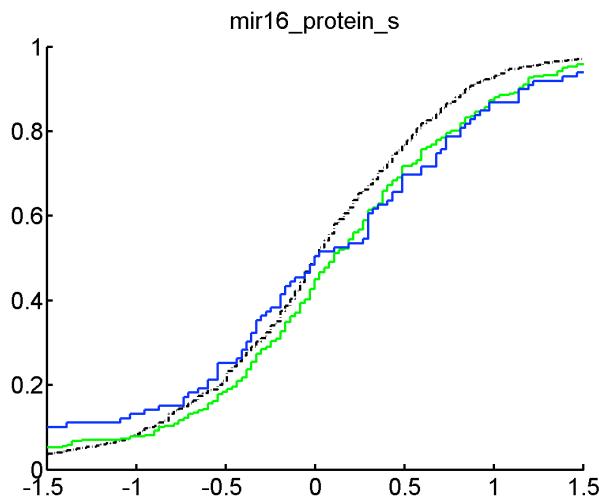
Experiment: mir155-protein-s

mi/siRNA: miR-155



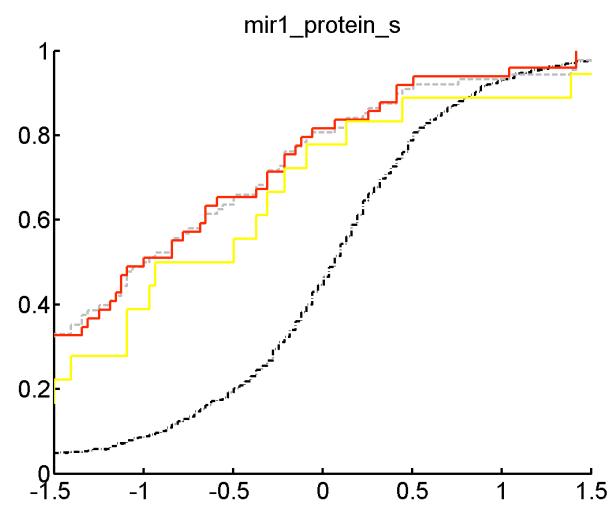
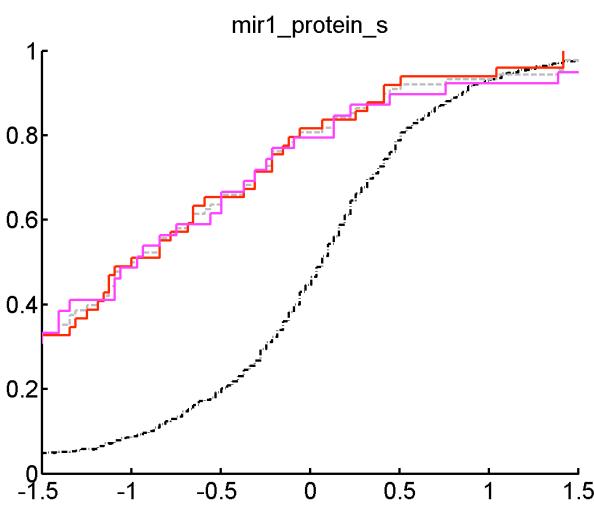
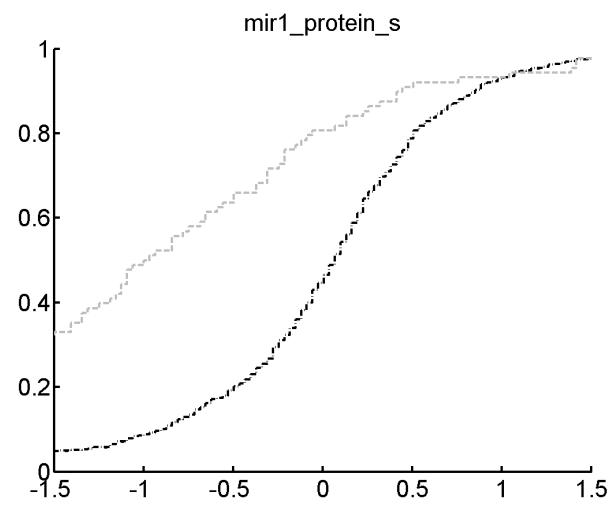
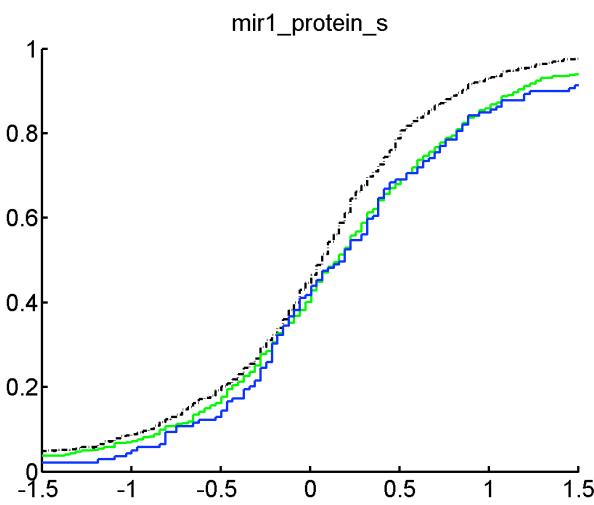
Experiment: mir16-protein-s

mi/siRNA: miR-16



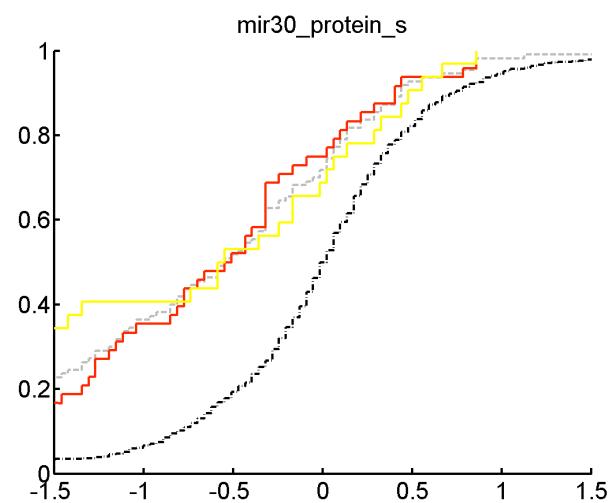
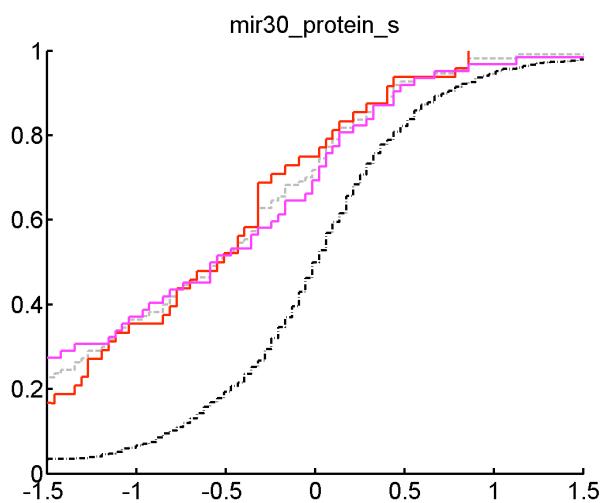
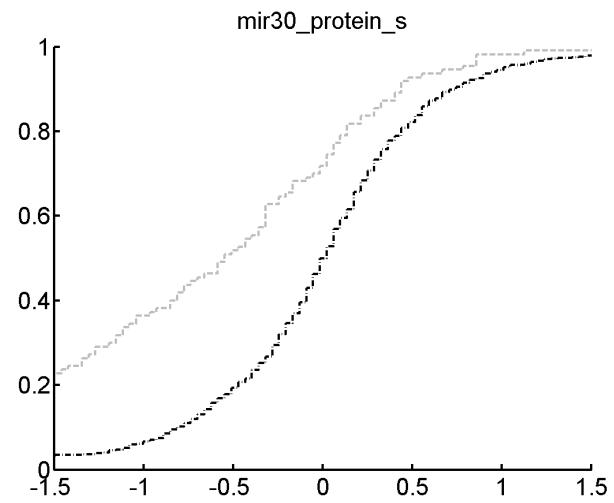
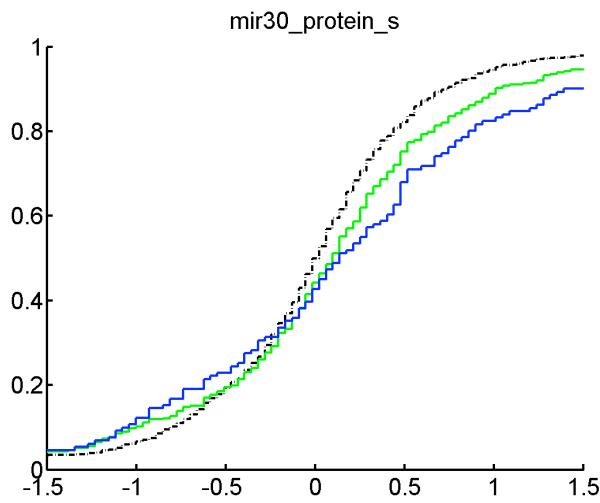
Experiment: mir1-protein-s

mi/siRNA: miR-1



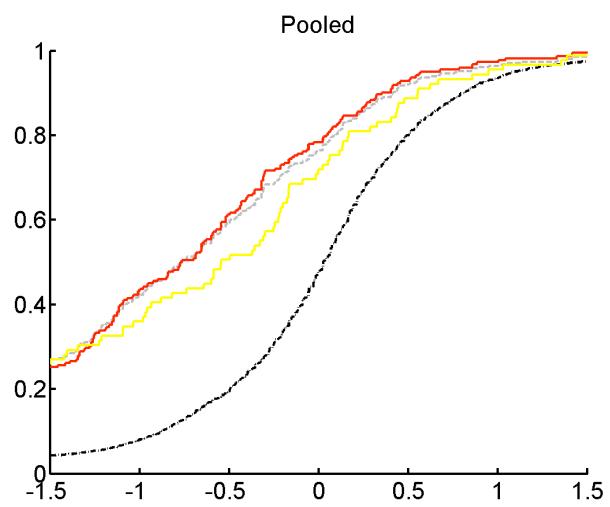
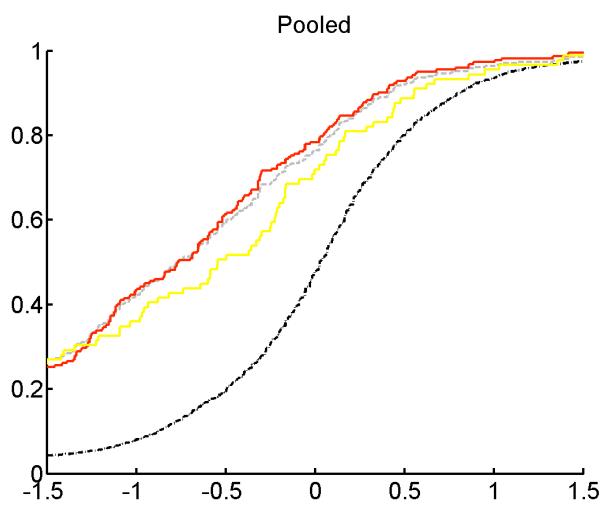
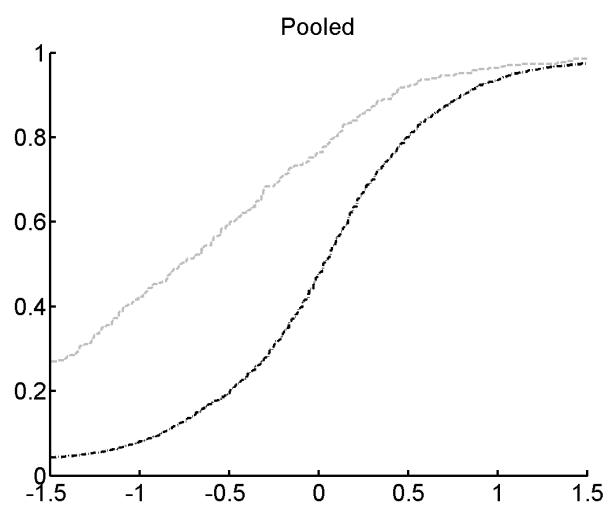
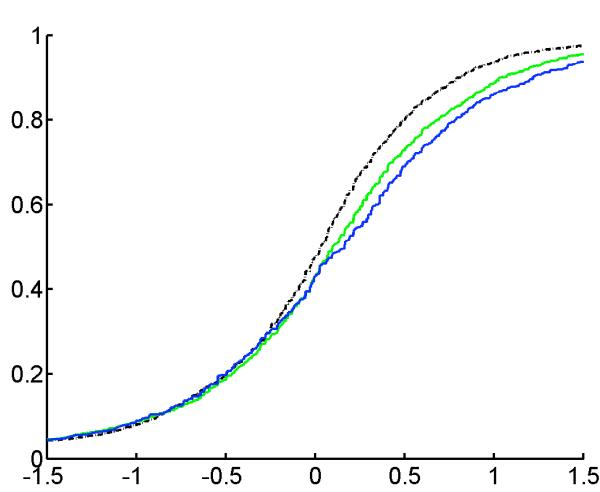
Experiment: mir30-protein-s

mi/siRNA: miR-30a



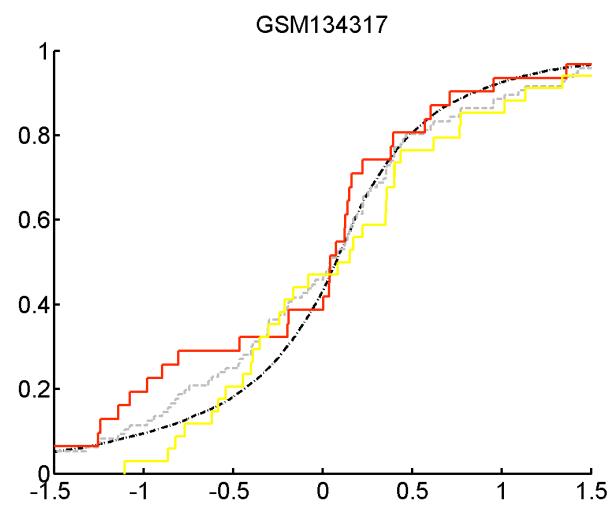
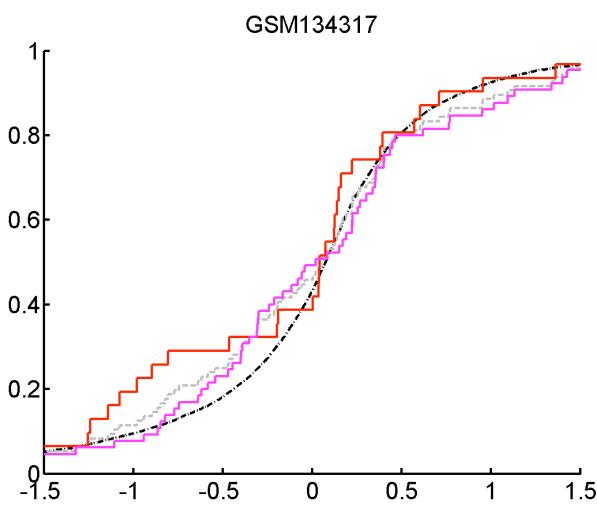
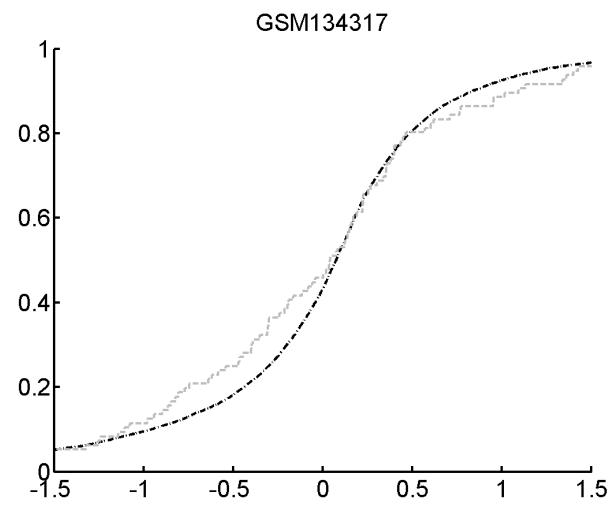
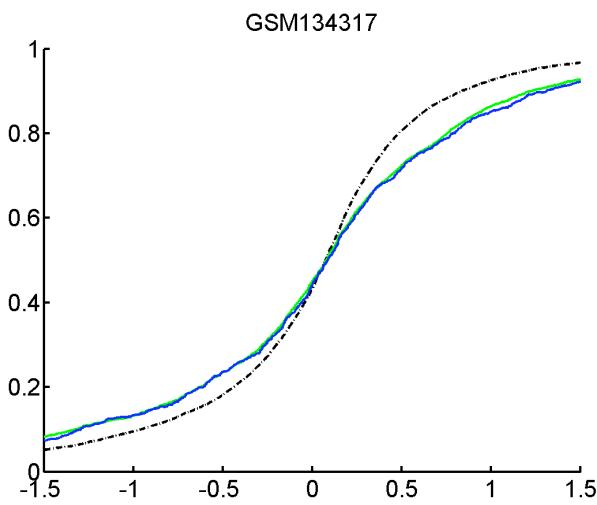
Experiment: protein

mi/siRNA: pooled



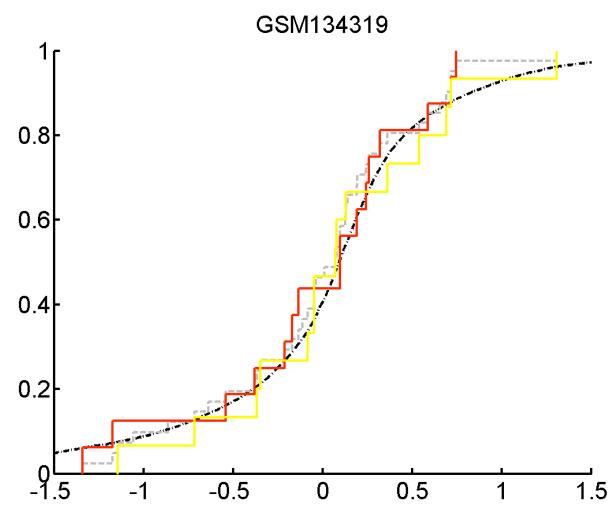
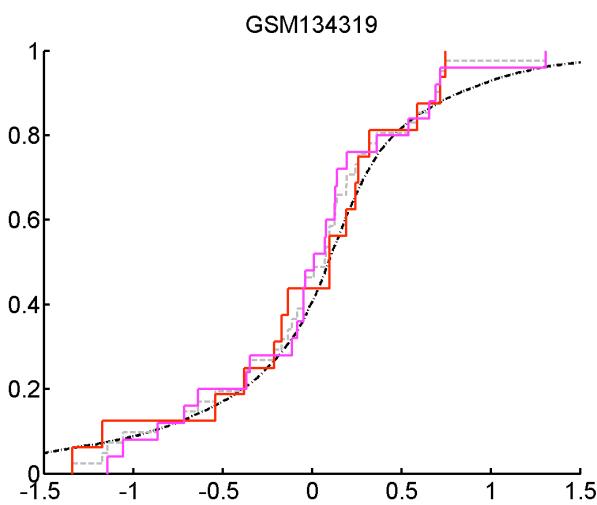
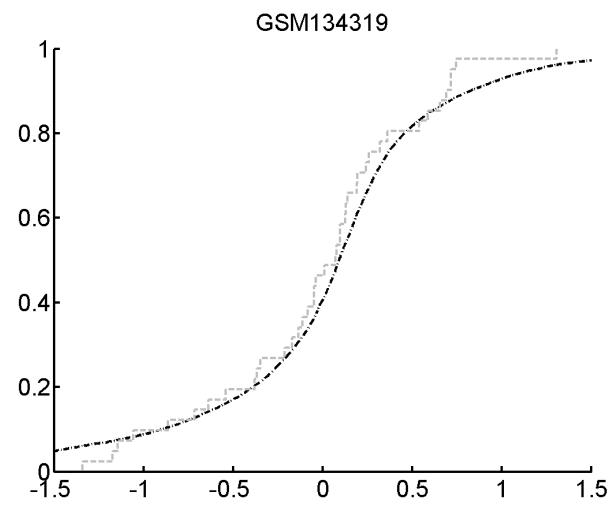
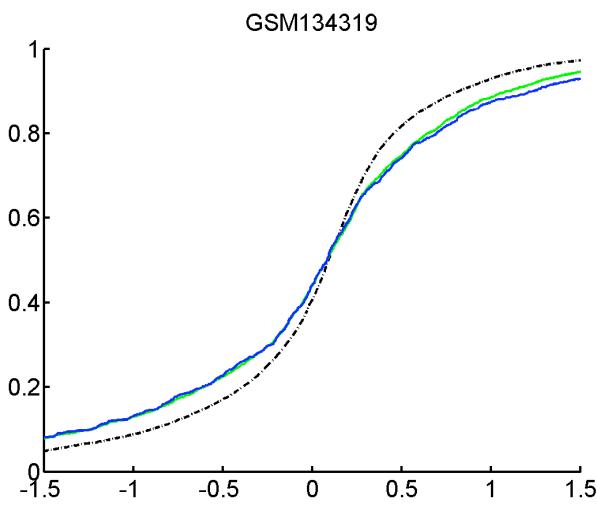
Experiment: GSM134317

mi/siRNA: PIK3CA-2629



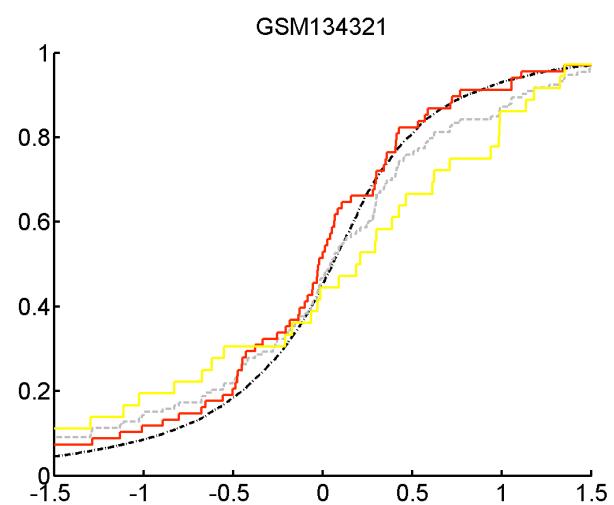
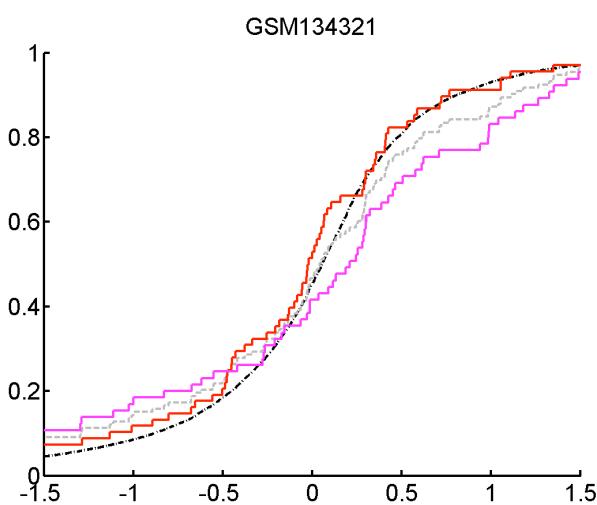
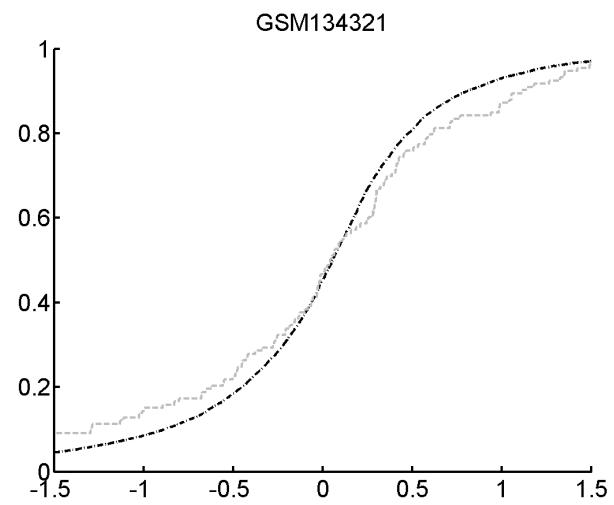
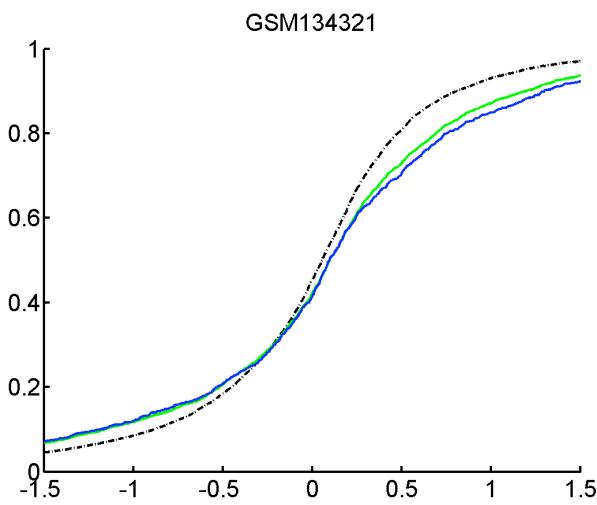
Experiment: GSM134319

mi/siRNA: MPHOSPH1-2692



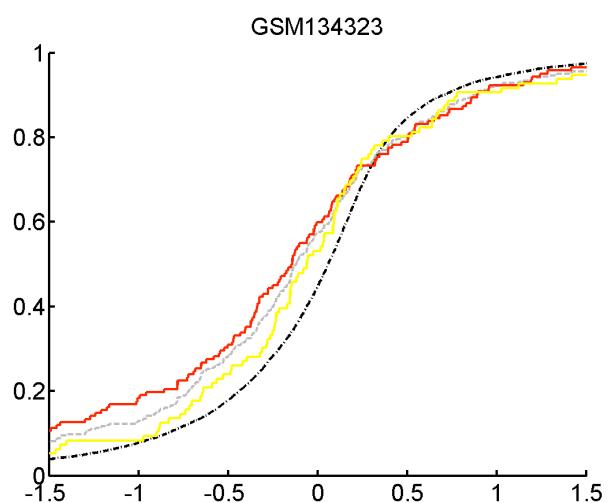
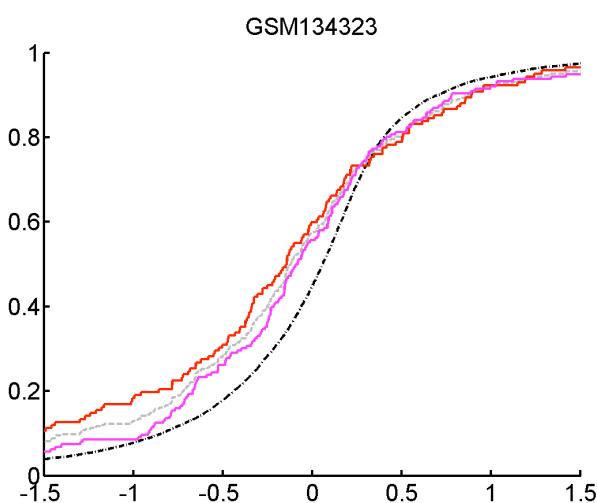
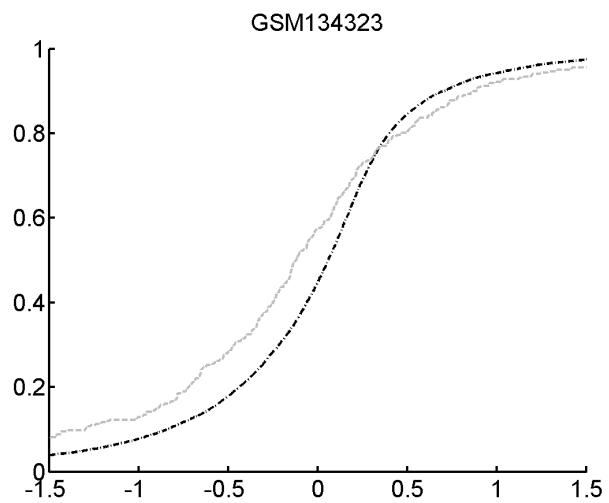
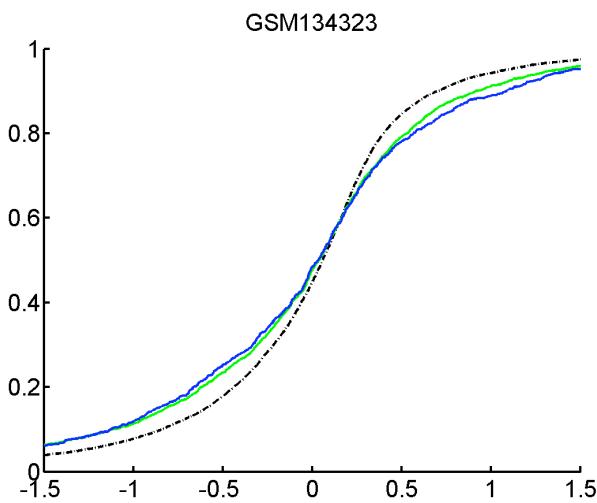
Experiment: GSM134321

mi/siRNA: SOS1-1582



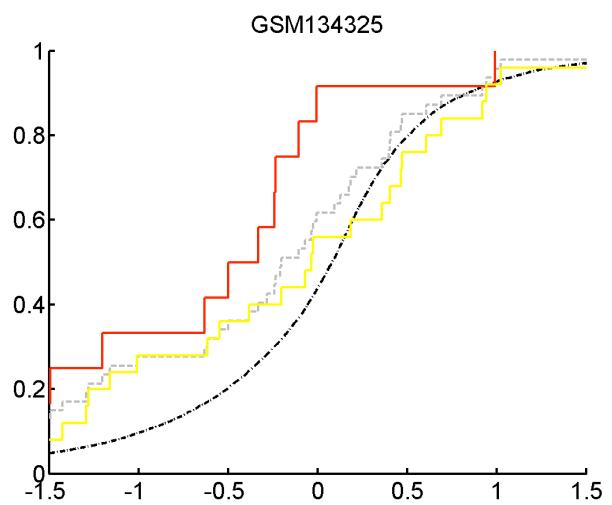
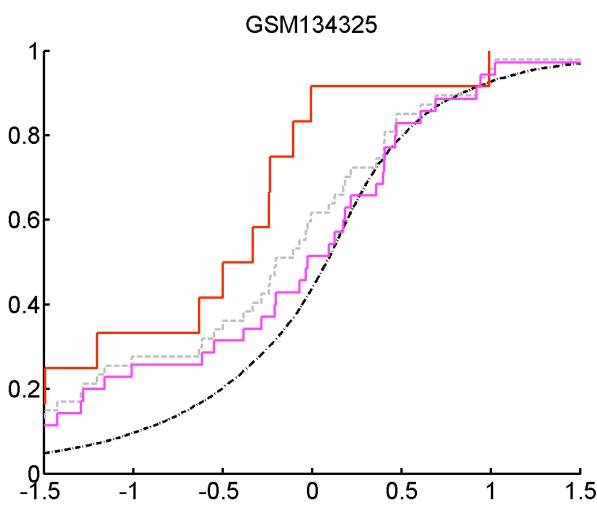
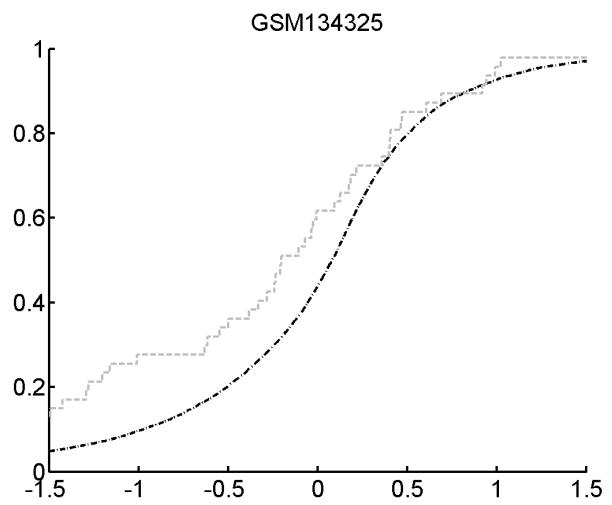
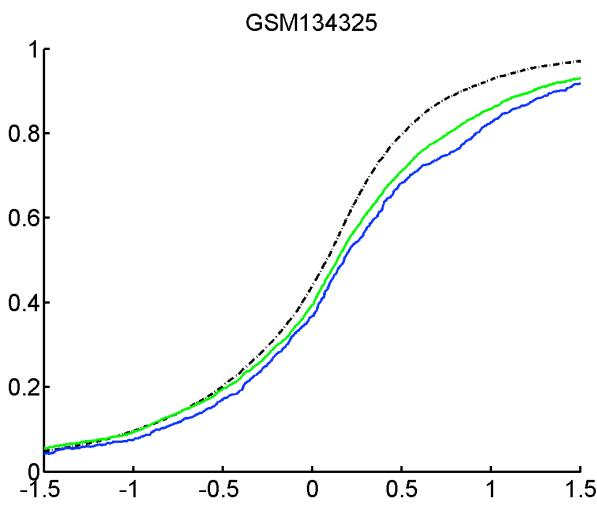
Experiment: GSM134323

mi/siRNA: PRKCE-1295



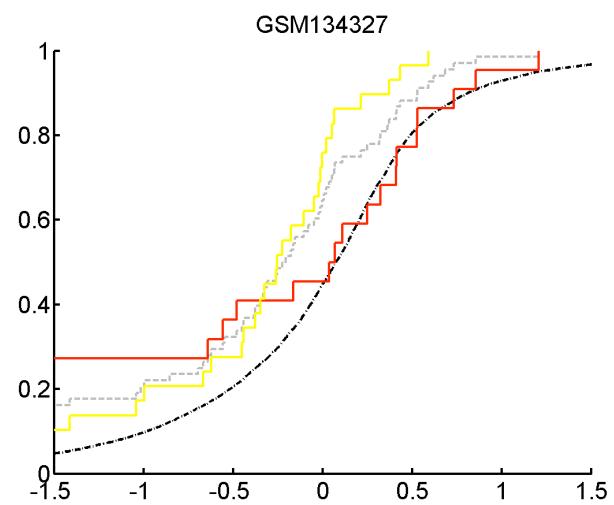
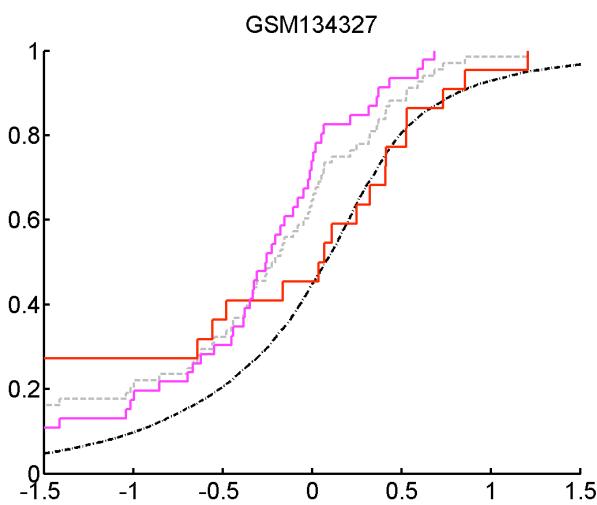
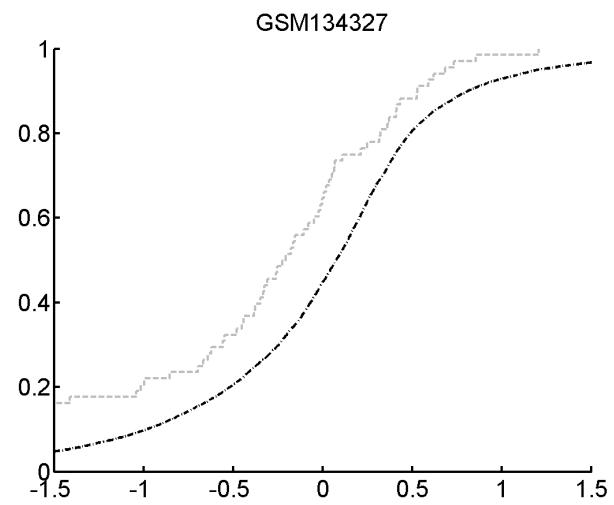
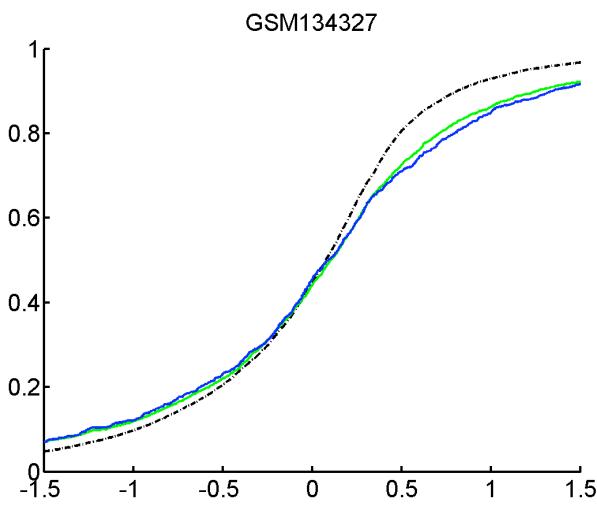
Experiment: GSM134325

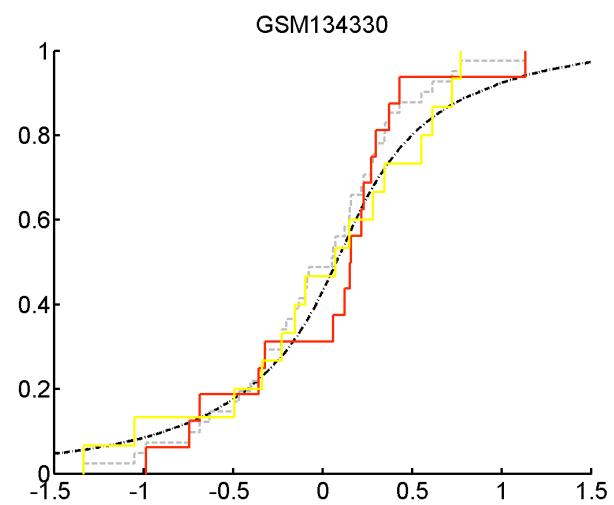
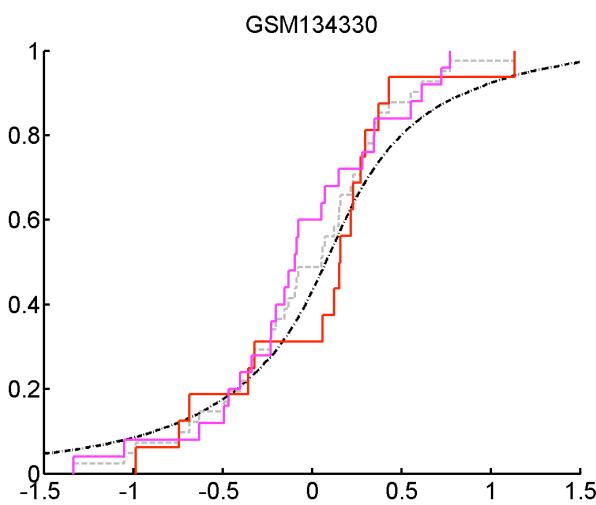
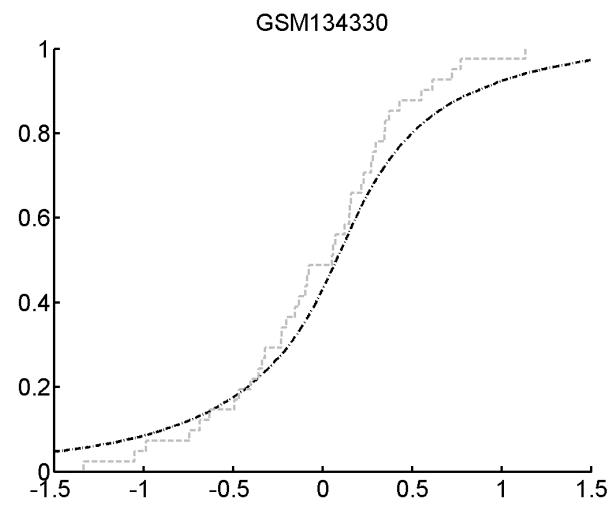
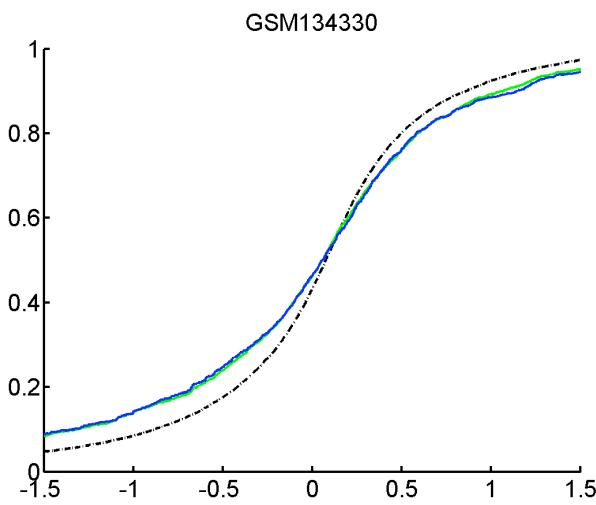
mi/siRNA: VHL-2651



Experiment: GSM134327

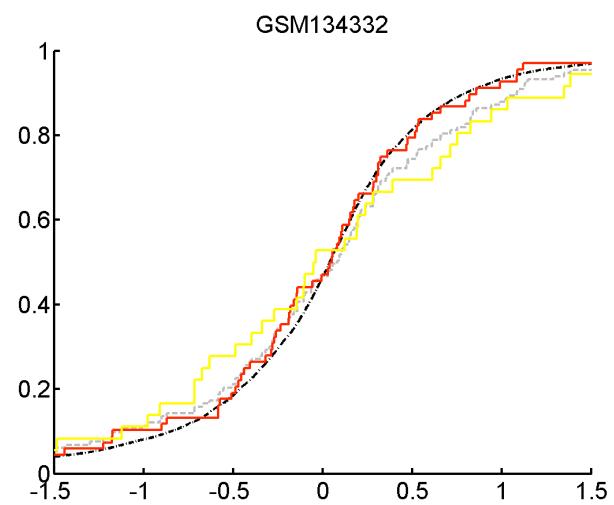
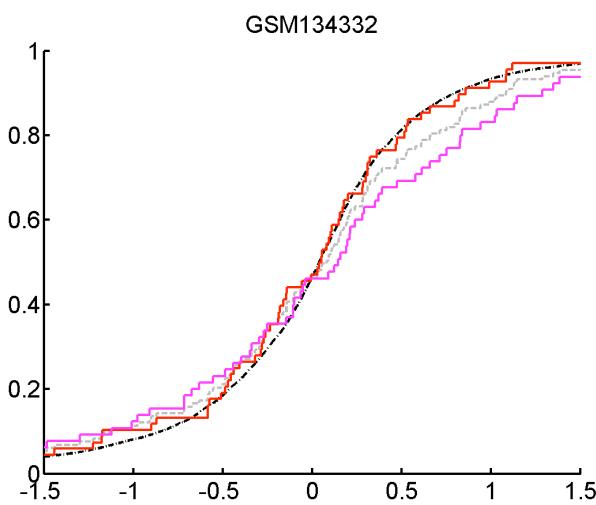
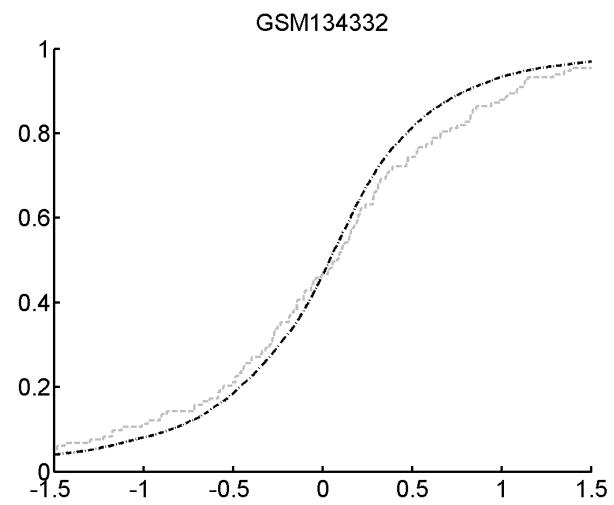
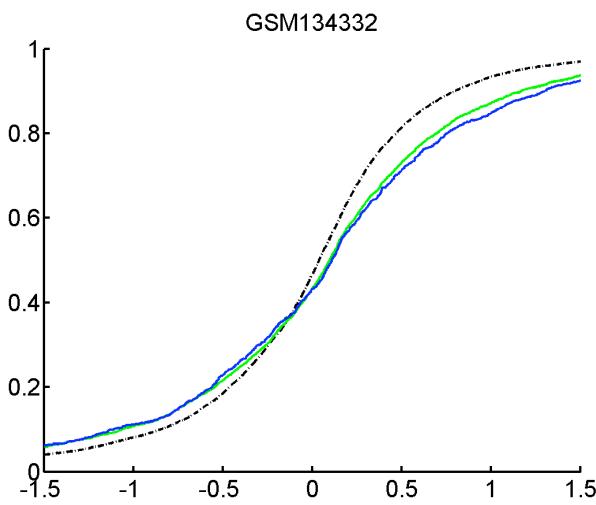
mi/siRNA: VHL-2652





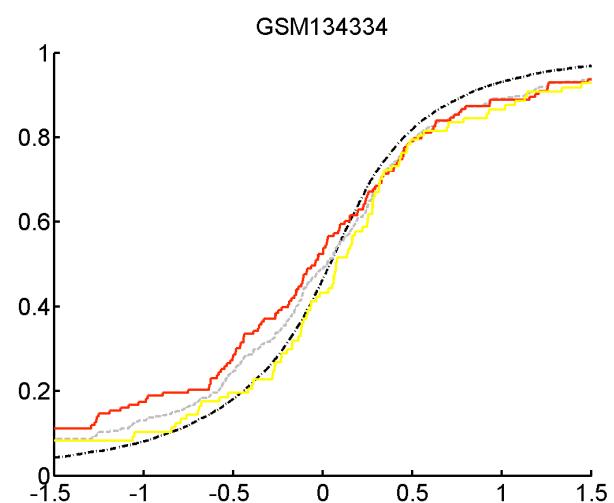
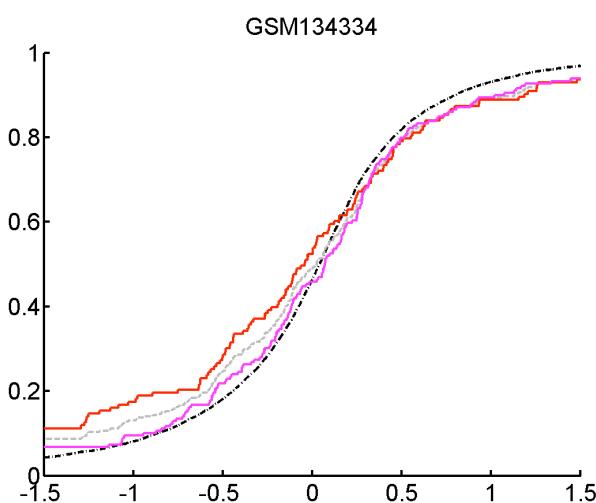
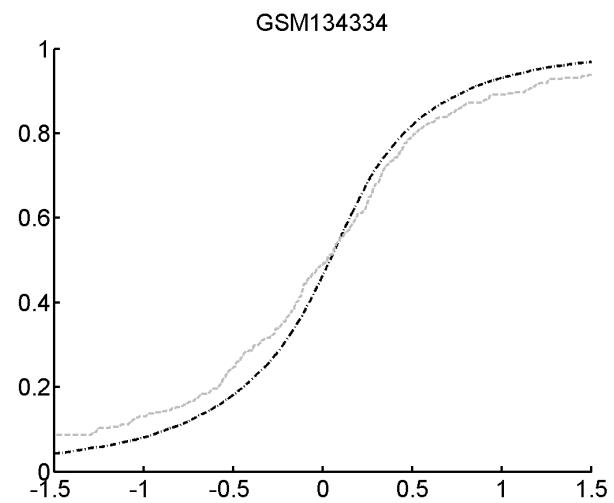
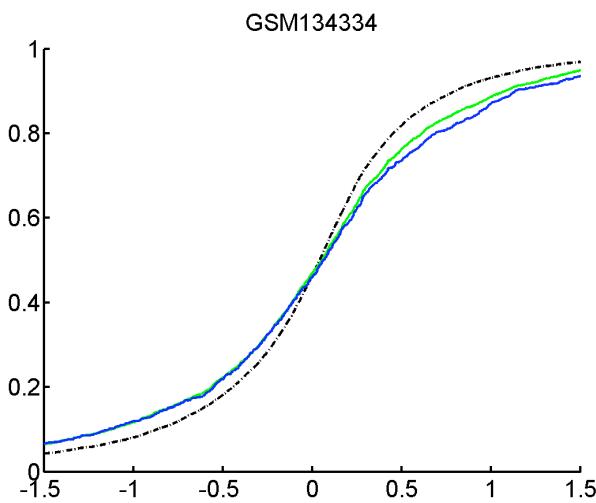
Experiment: GSM134332

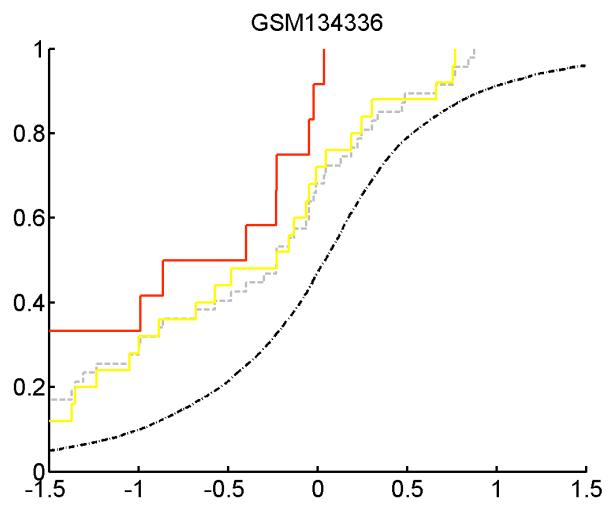
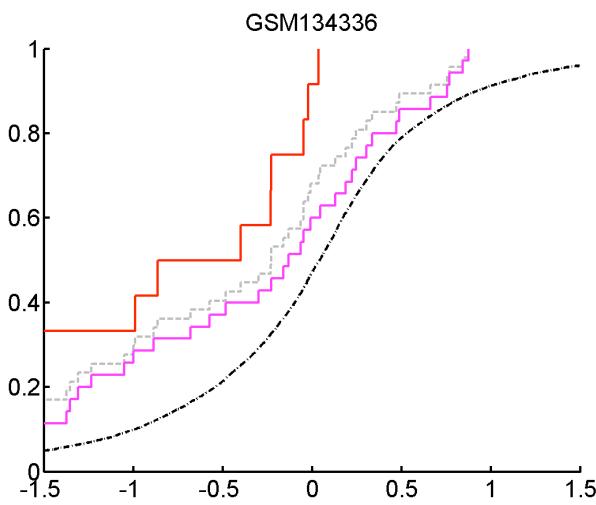
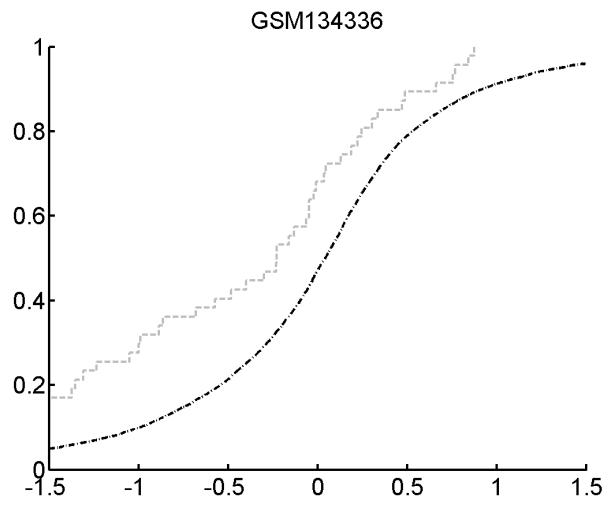
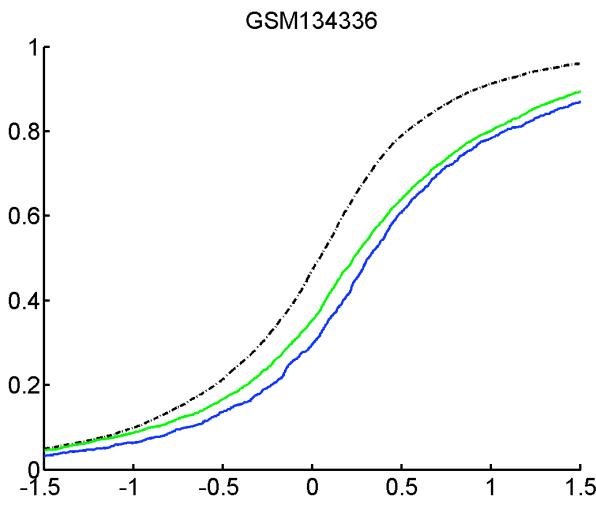
mi/siRNA: SOS1-1582



Experiment: GSM134334

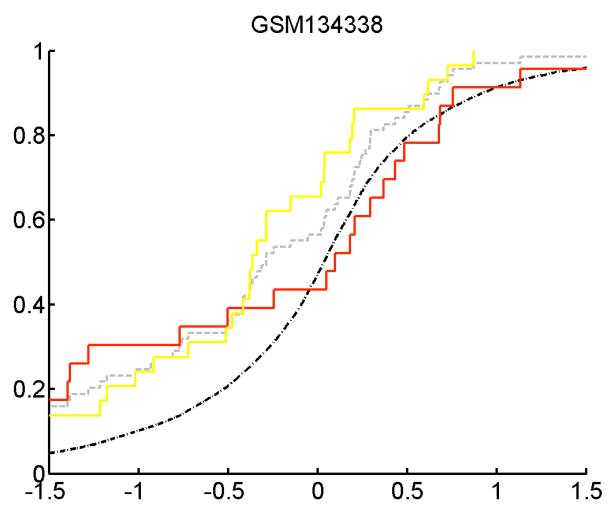
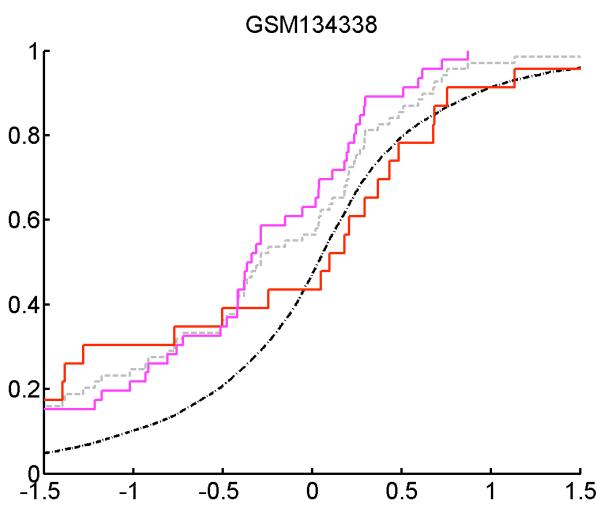
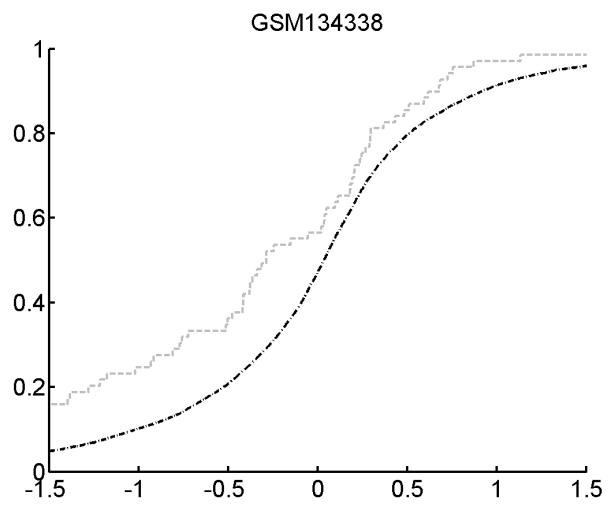
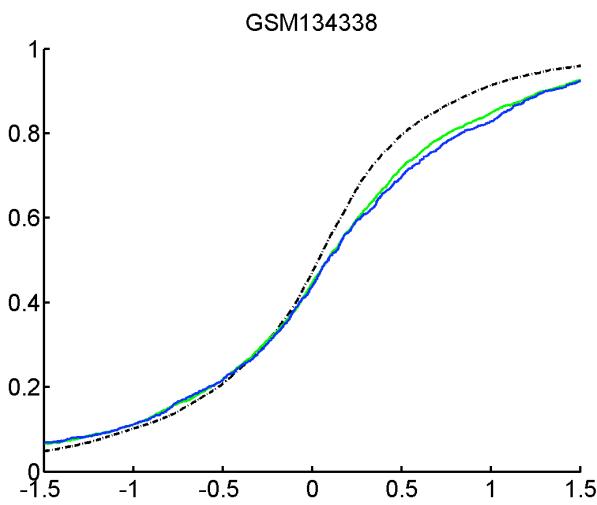
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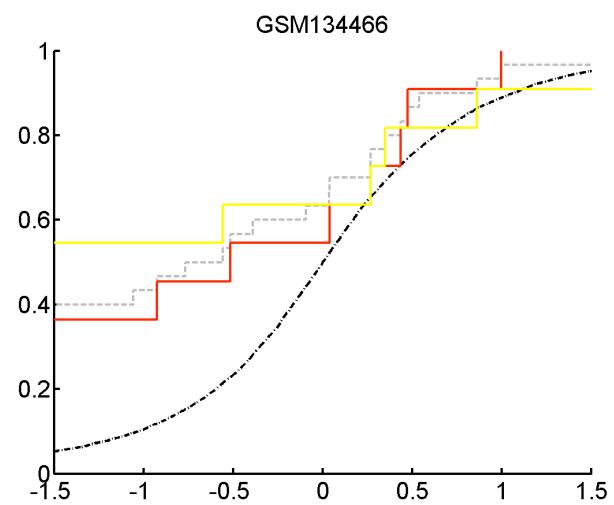
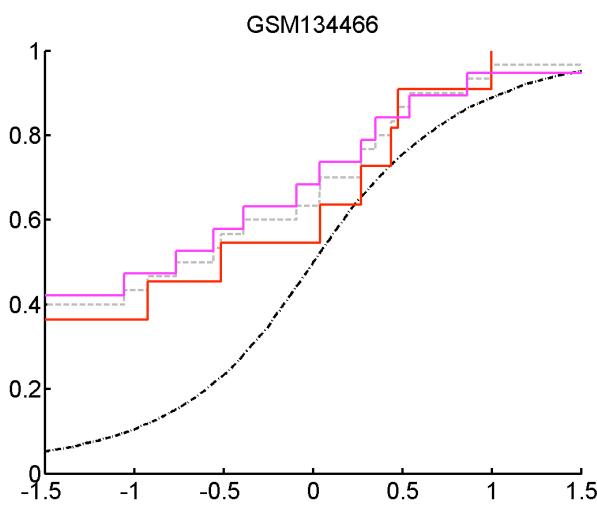
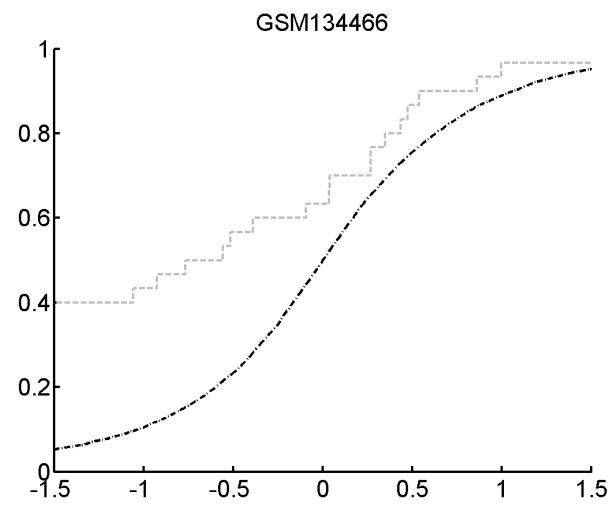
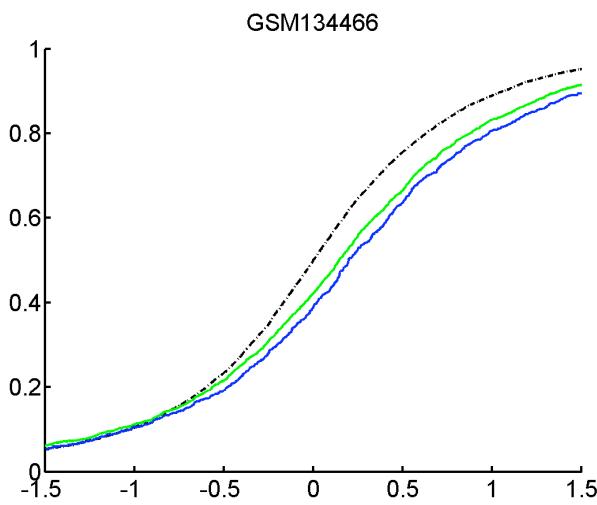




Experiment: GSM134338

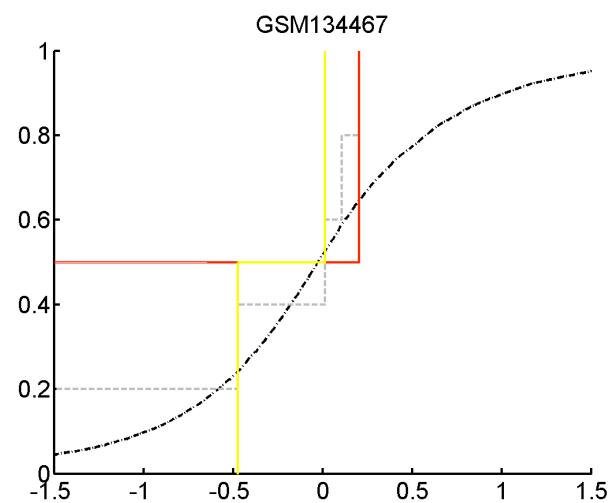
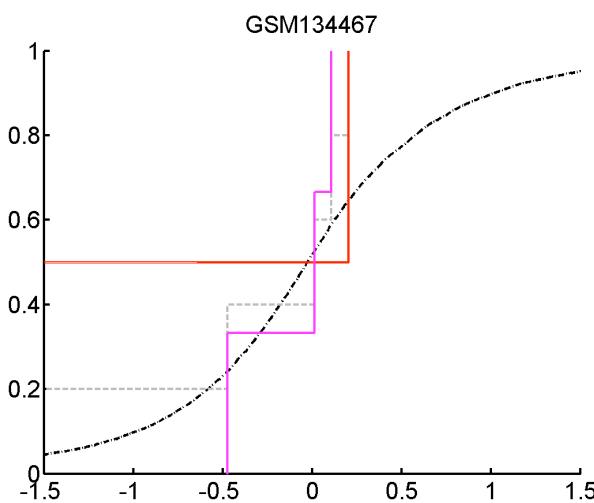
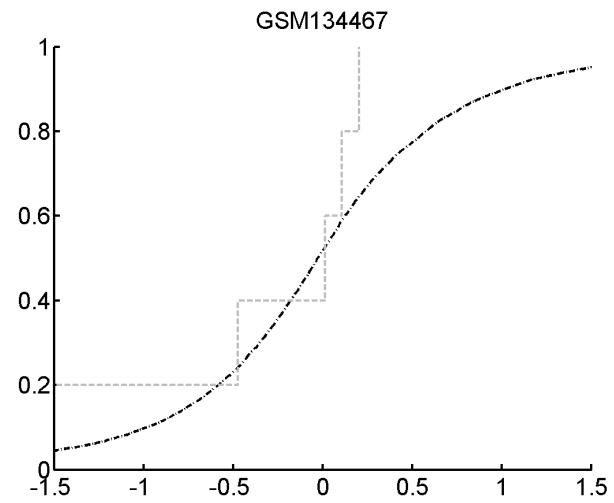
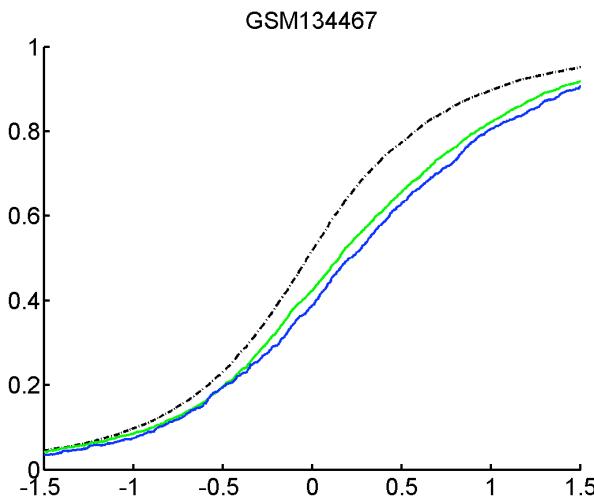
mi/siRNA: VHL-2652

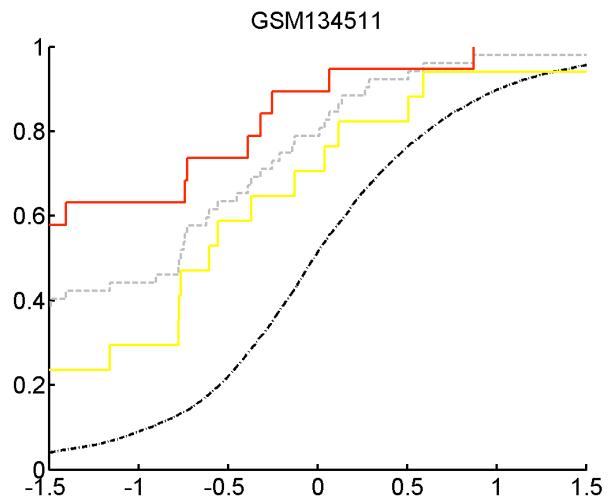
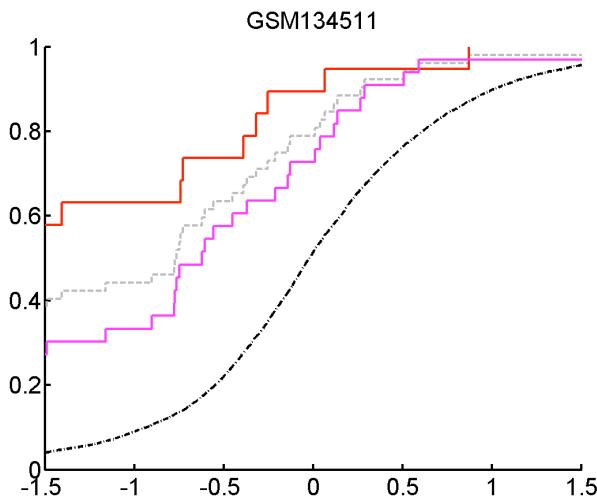
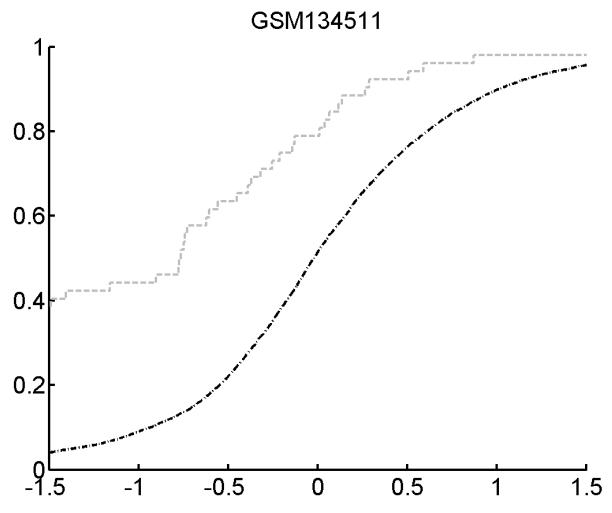
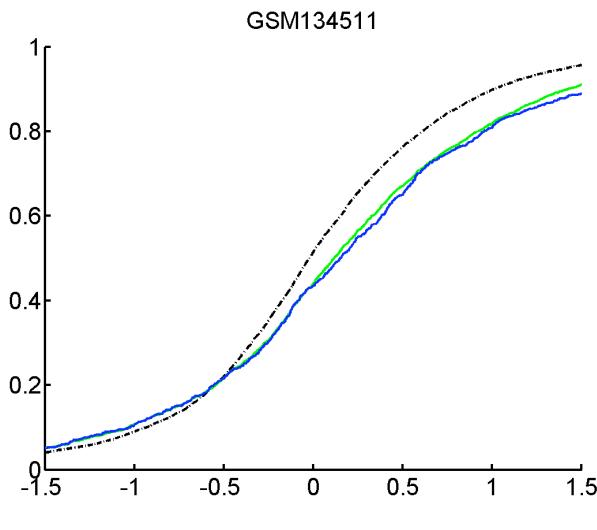


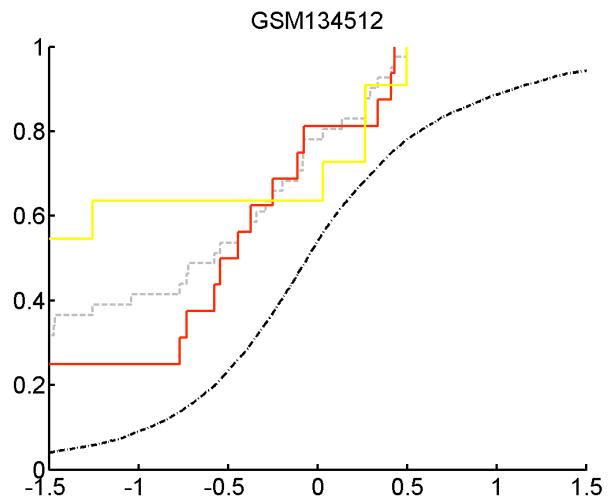
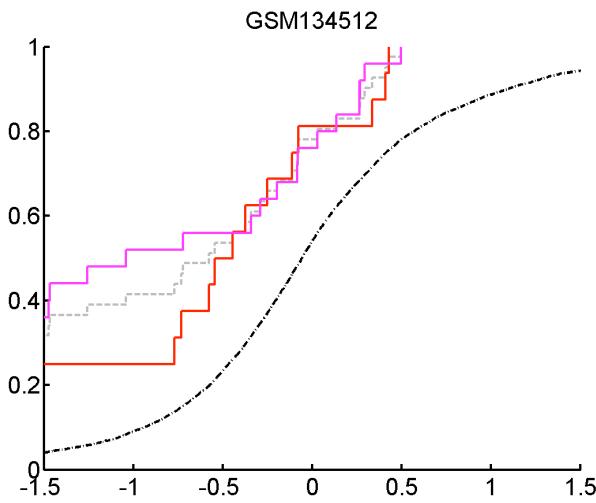
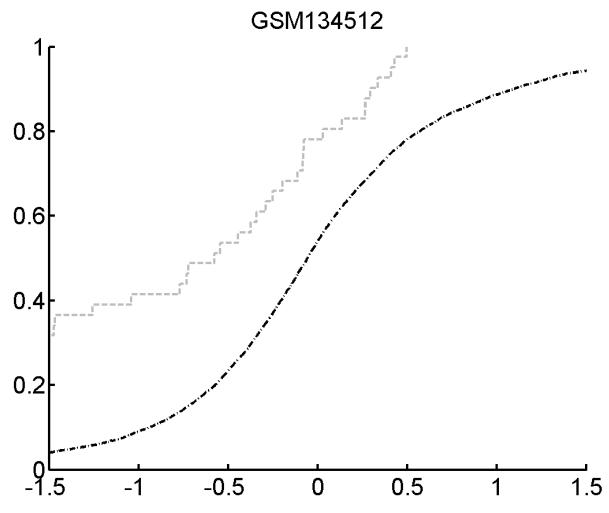
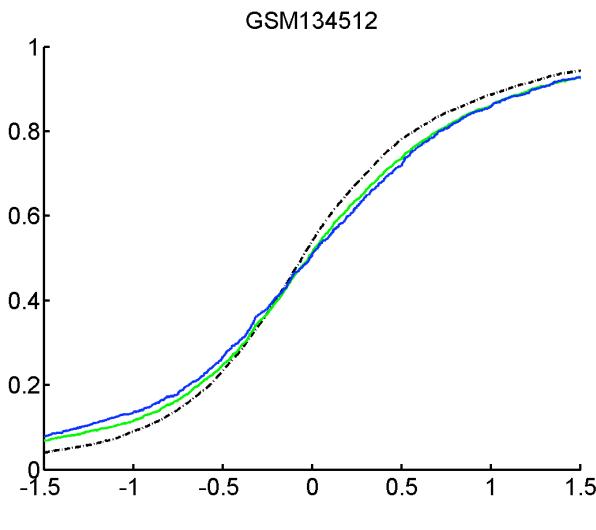


Experiment: GSM134467

mi/siRNA: PLK772

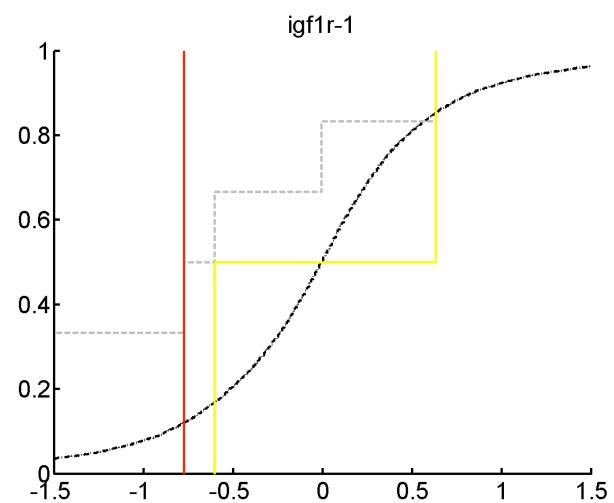
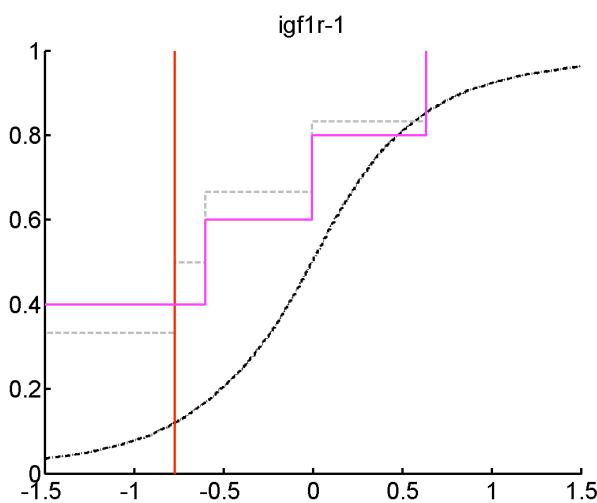
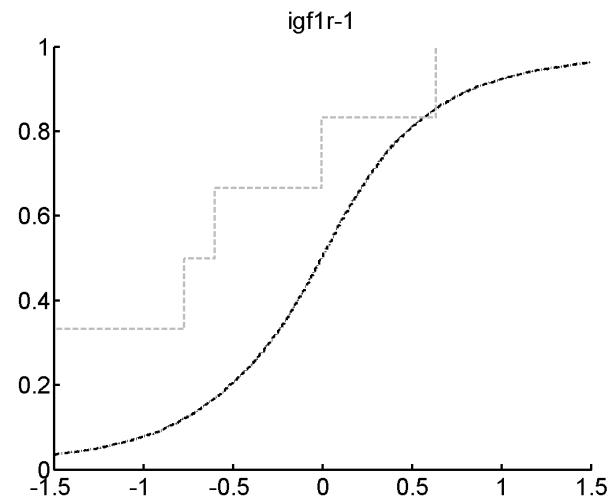
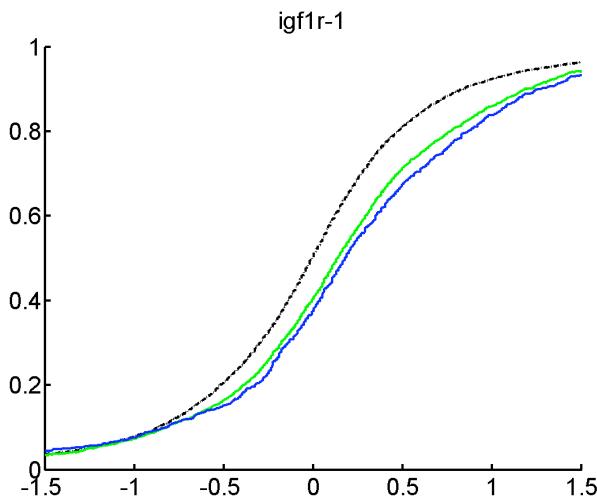






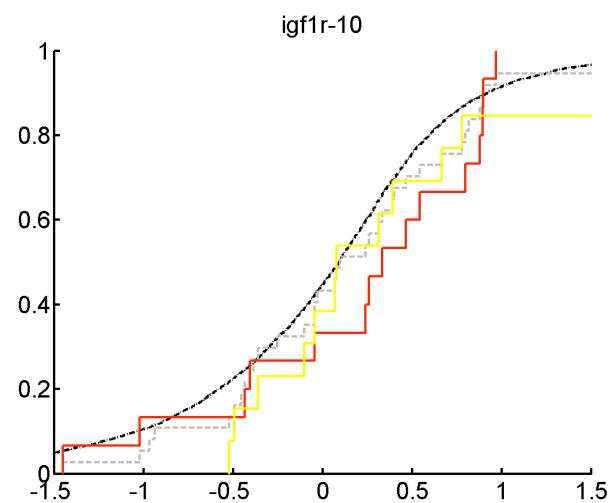
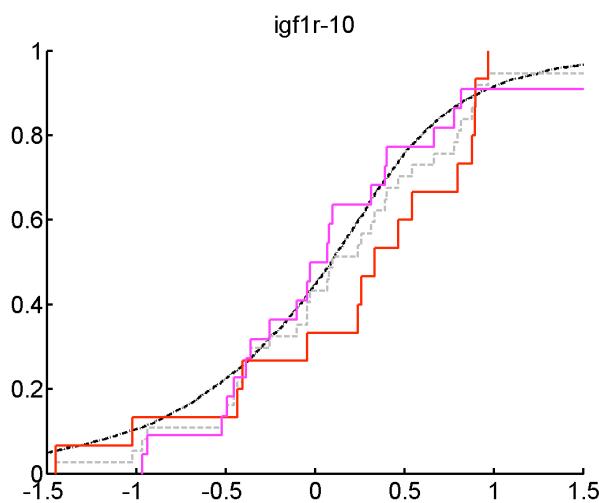
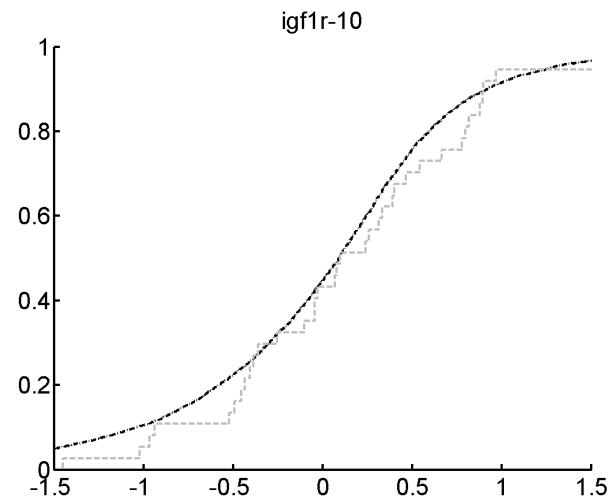
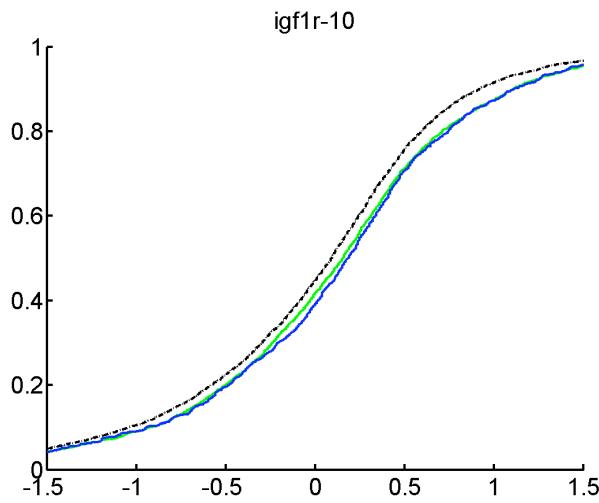
Experiment: igf1r-1

mi/siRNA: IGF1R-1



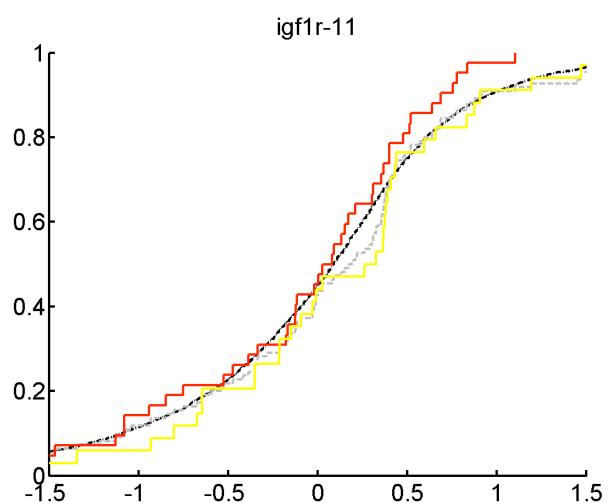
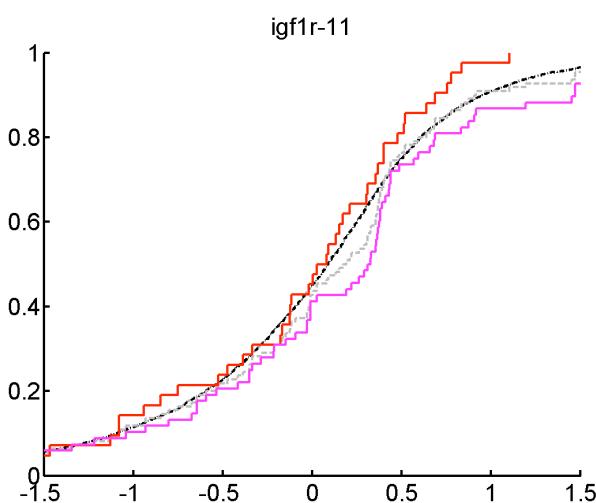
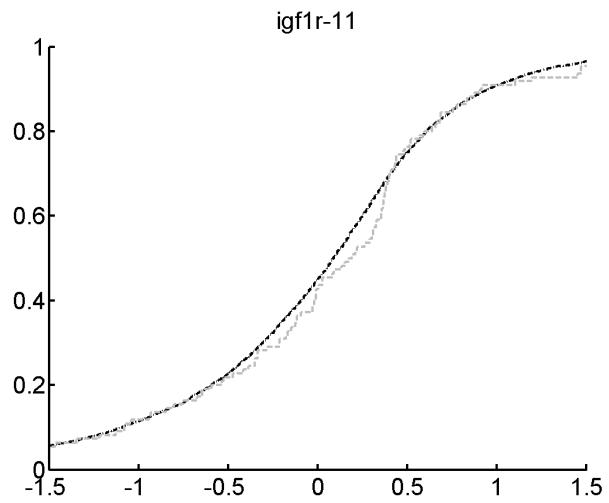
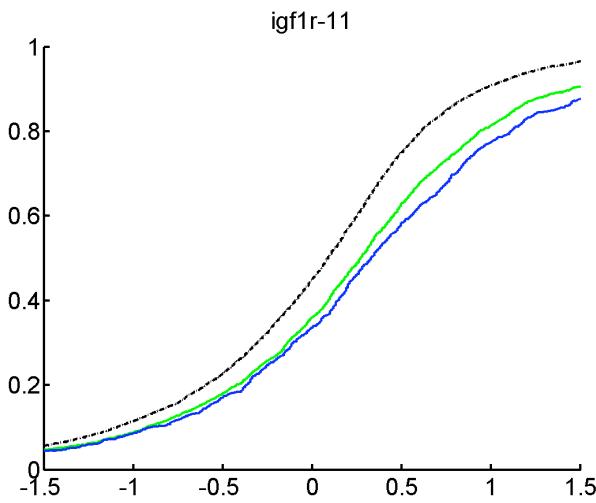
Experiment: igf1r-10

mi/siRNA: IGF1R-10



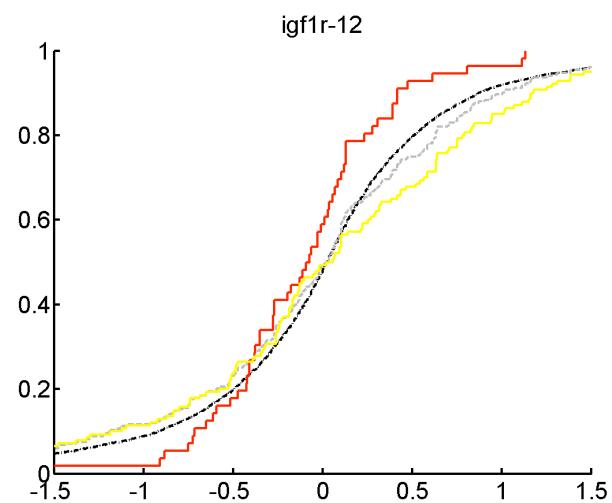
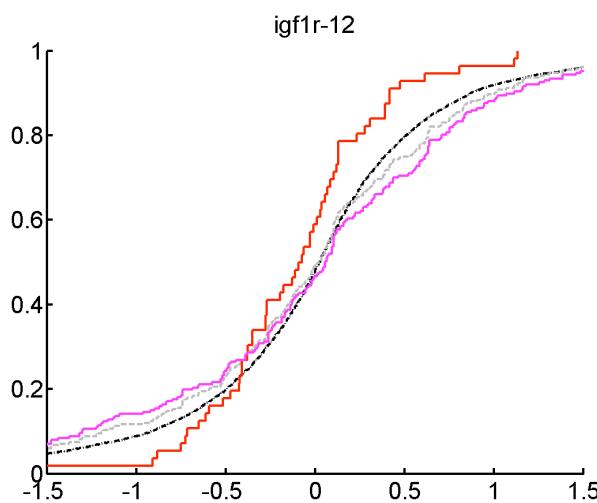
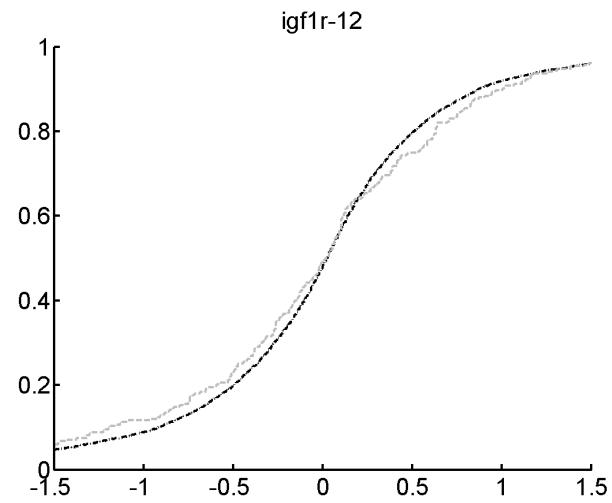
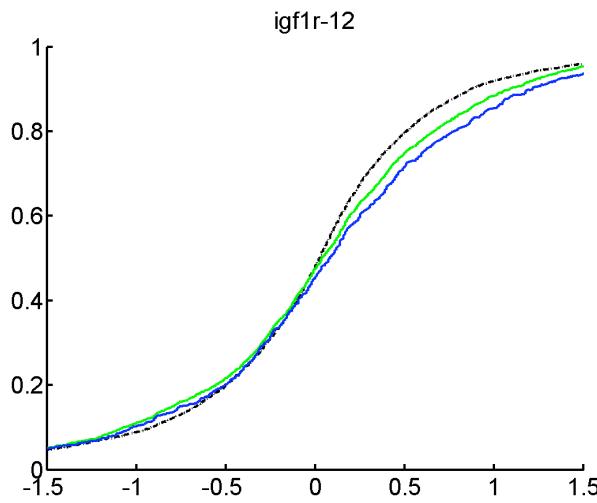
Experiment: igf1r-11

mi/siRNA: IGF1R-11



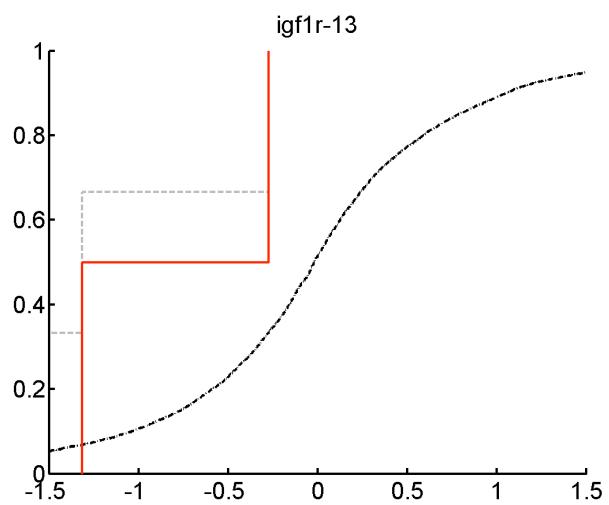
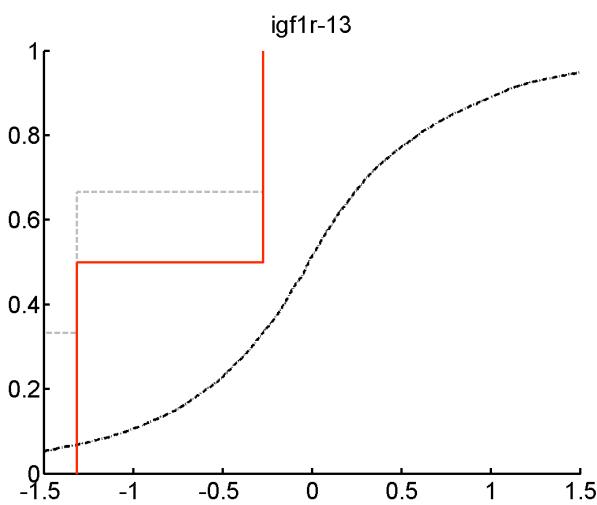
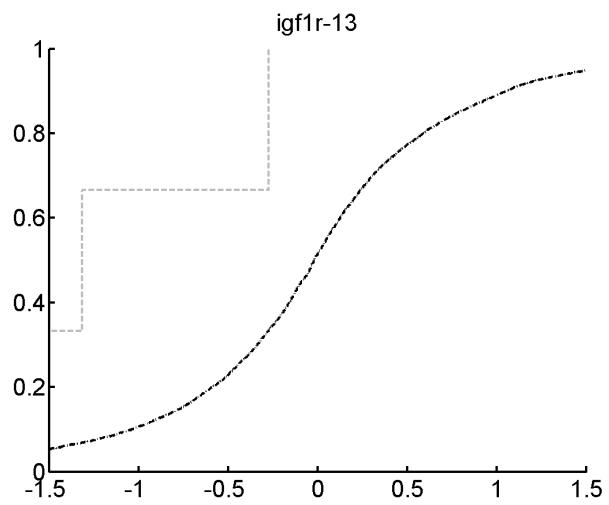
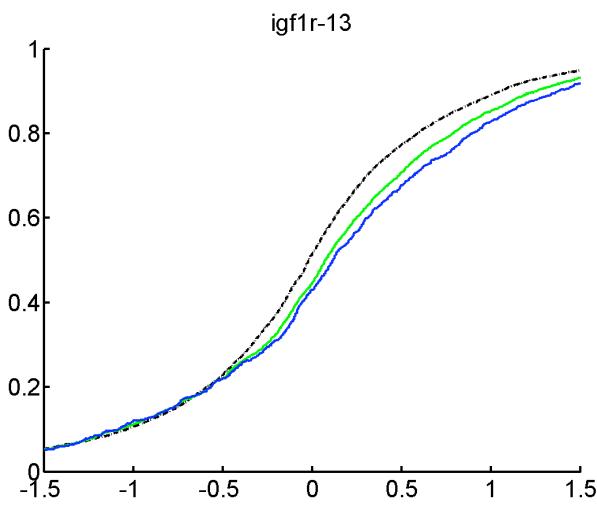
Experiment: igf1r-12

mi/siRNA: IGF1R-12



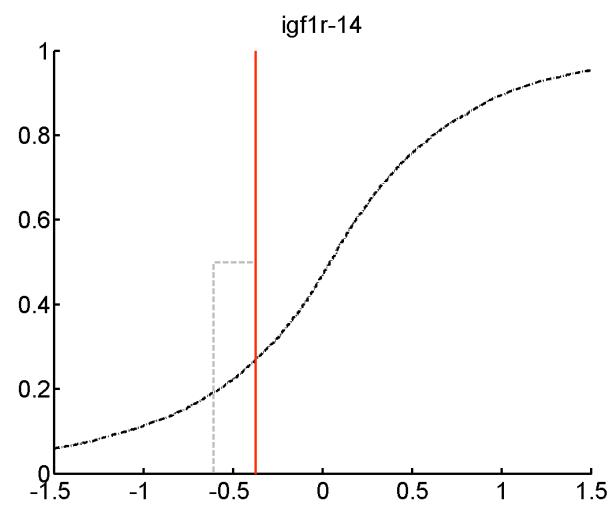
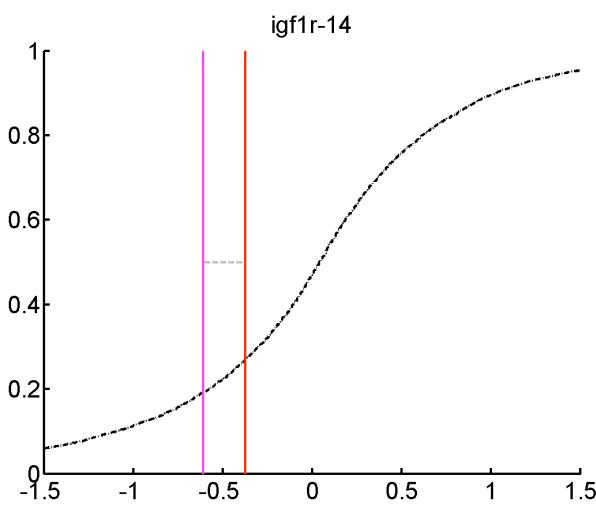
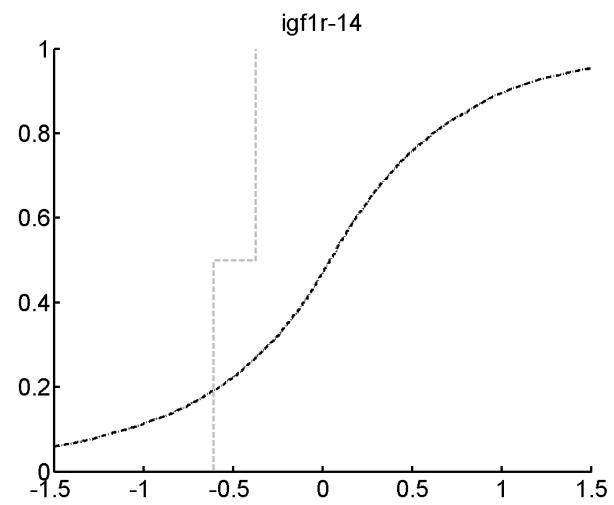
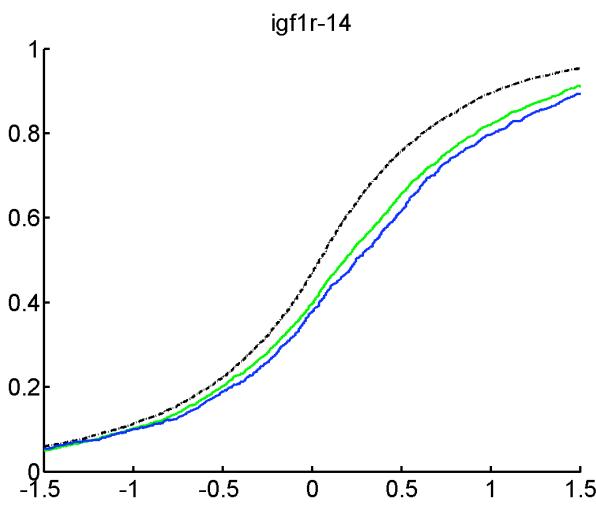
Experiment: igf1r-13

mi/siRNA: IGF1R-13



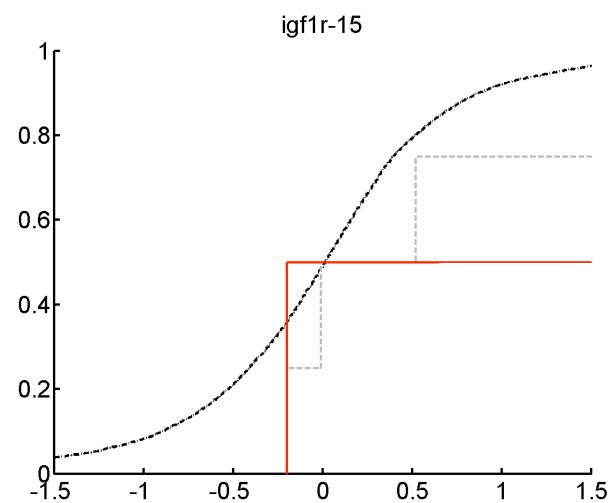
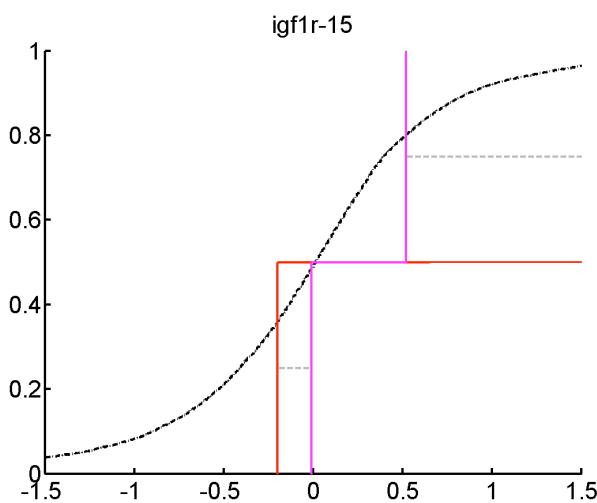
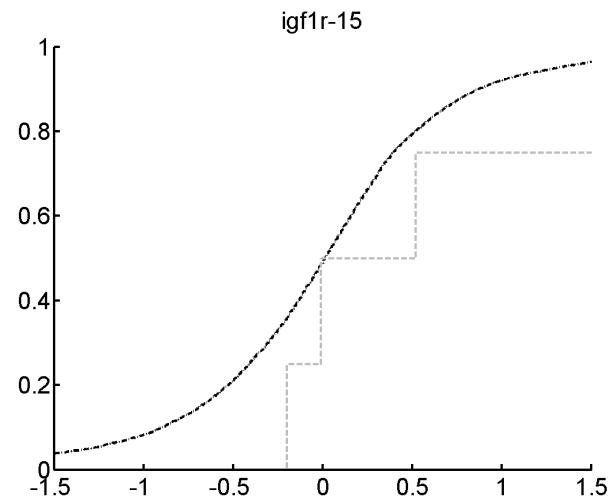
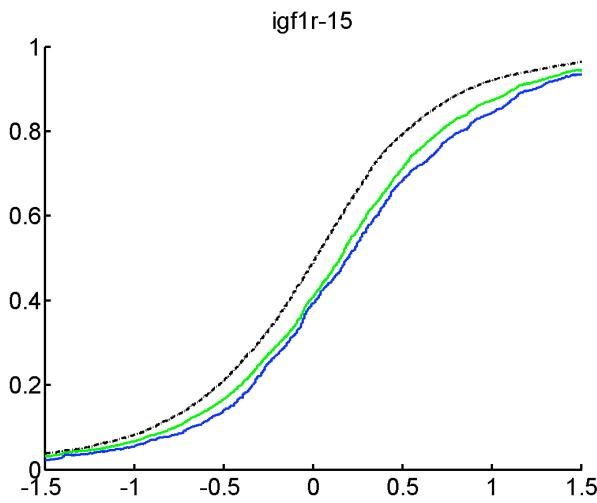
Experiment: igf1r-14

mi/siRNA: IGF1R-14



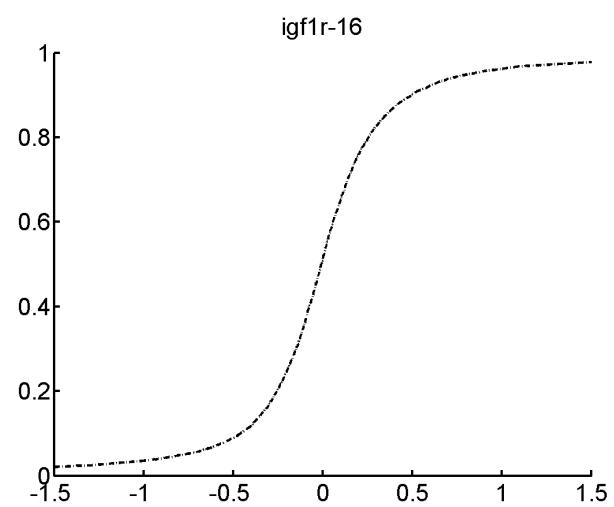
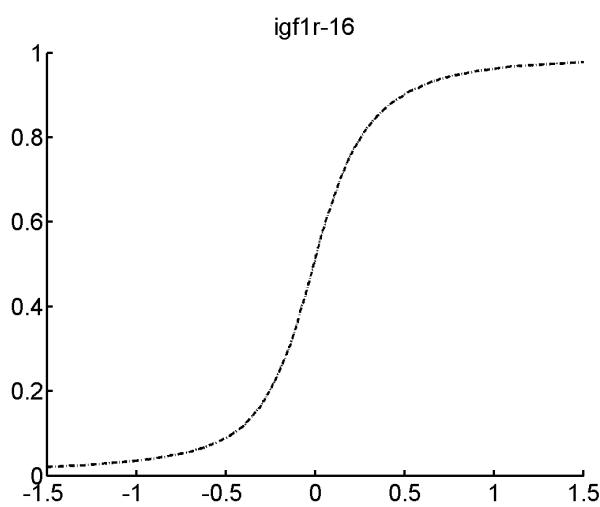
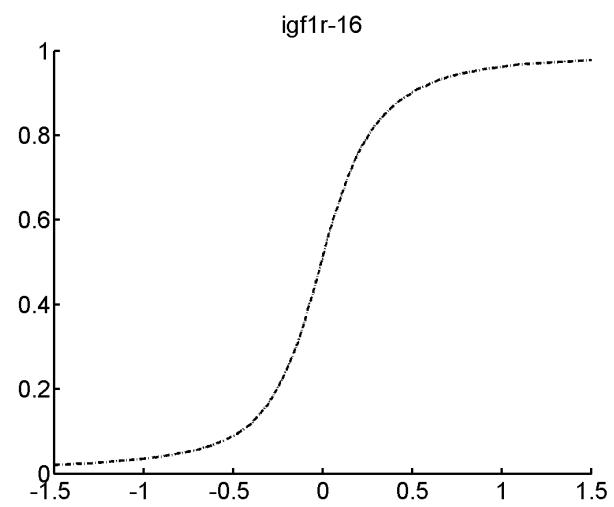
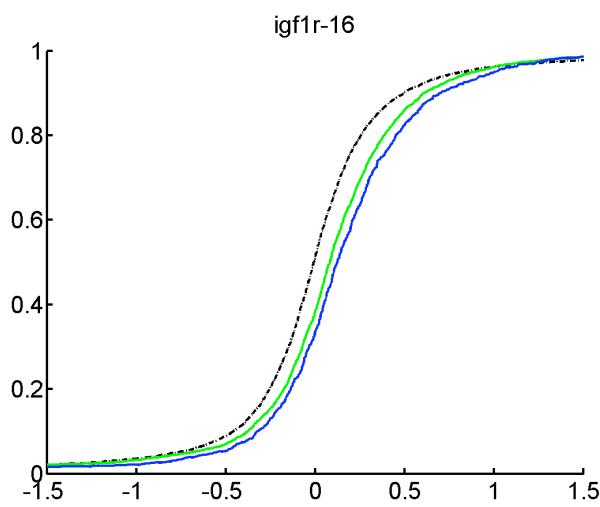
Experiment: igf1r-15

mi/siRNA: IGF1R-15



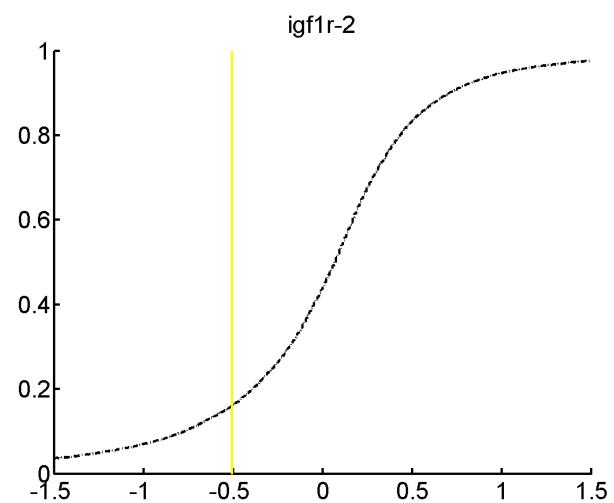
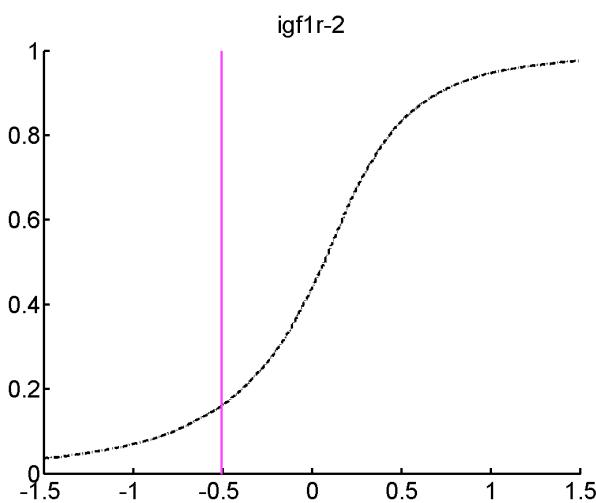
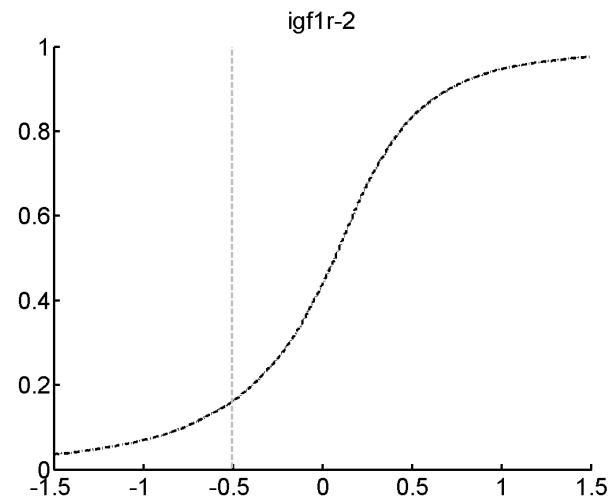
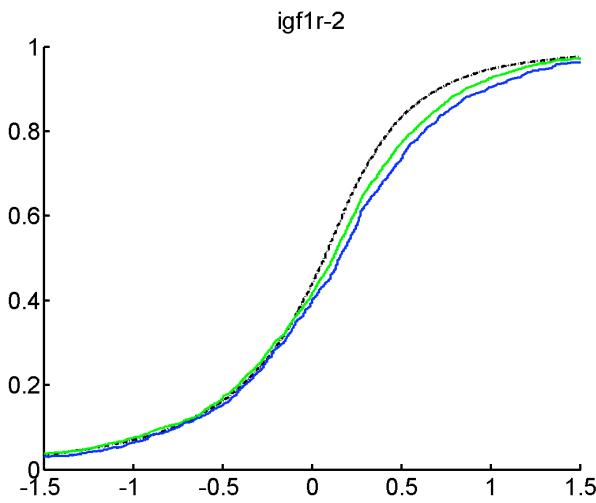
Experiment: igf1r-16

mi/siRNA: IGF1R-16



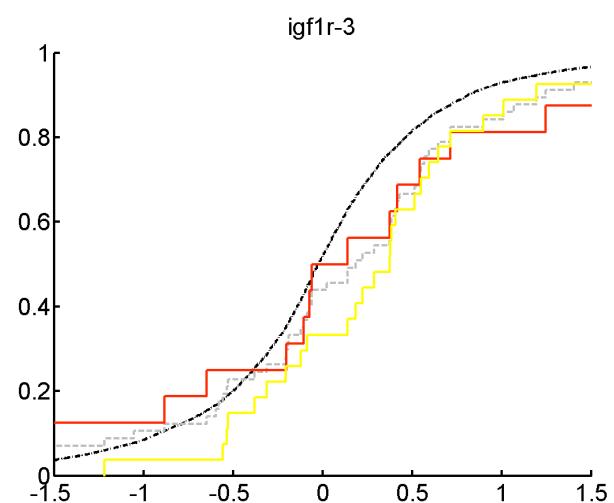
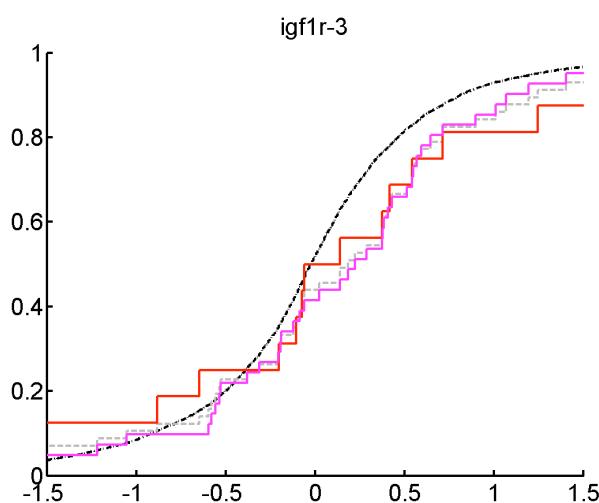
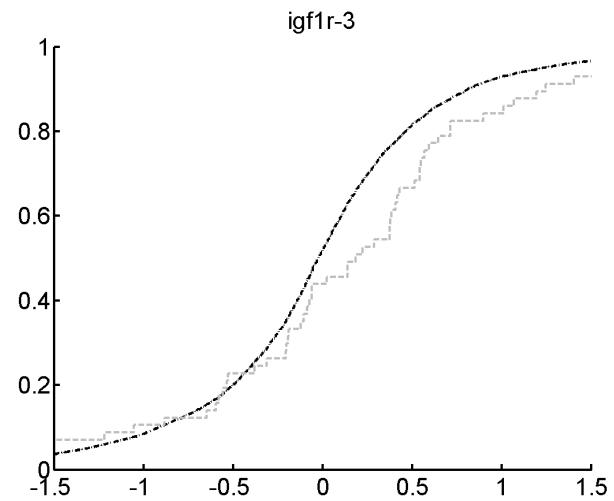
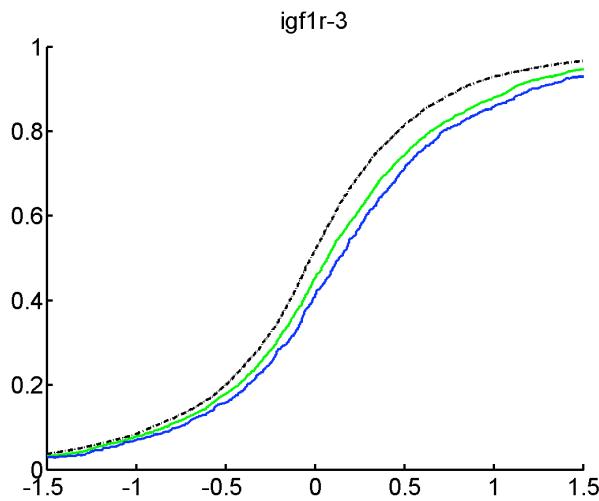
Experiment: igf1r-2

mi/siRNA: IGF1R-2



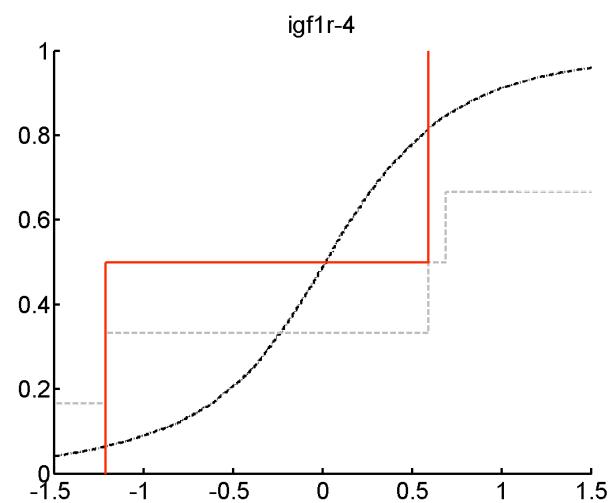
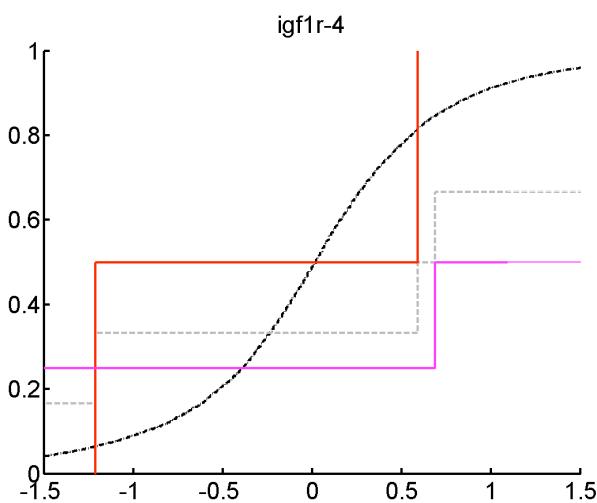
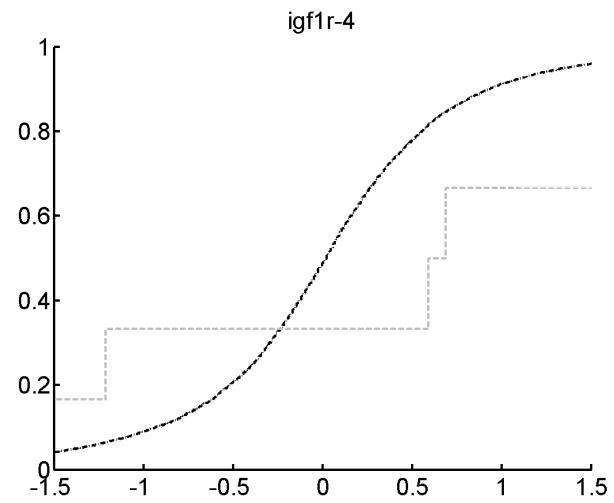
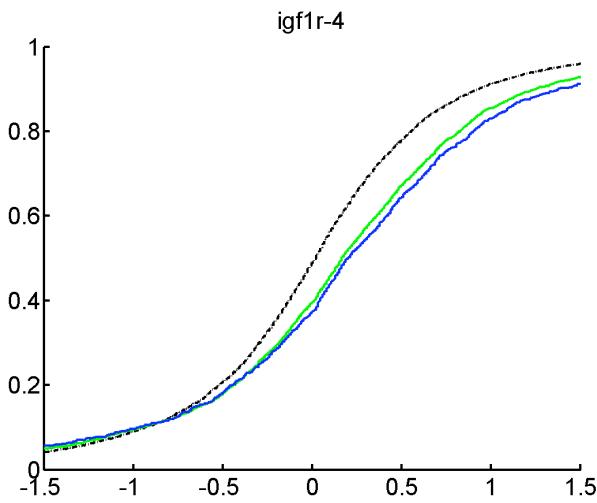
Experiment: igf1r-3

mi/siRNA: IGF1R-3



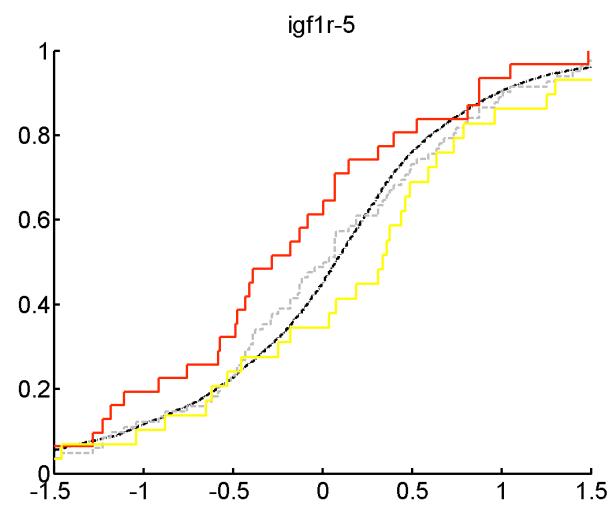
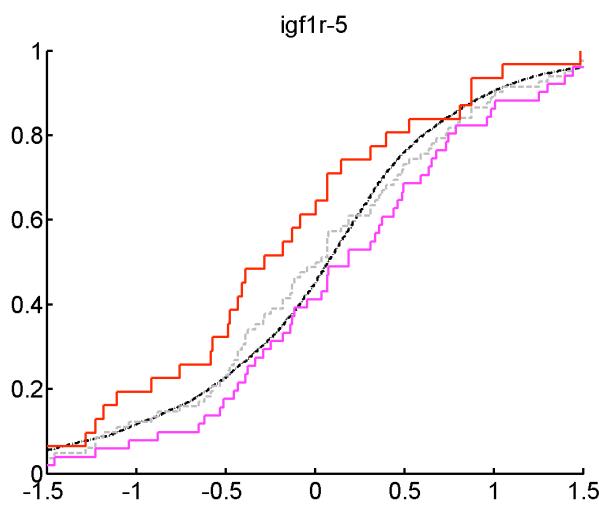
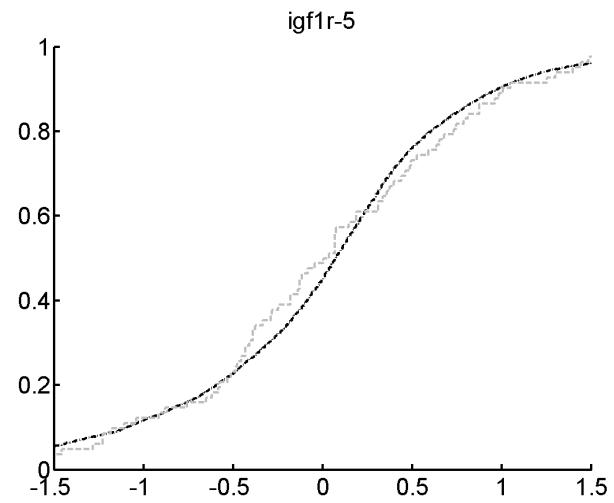
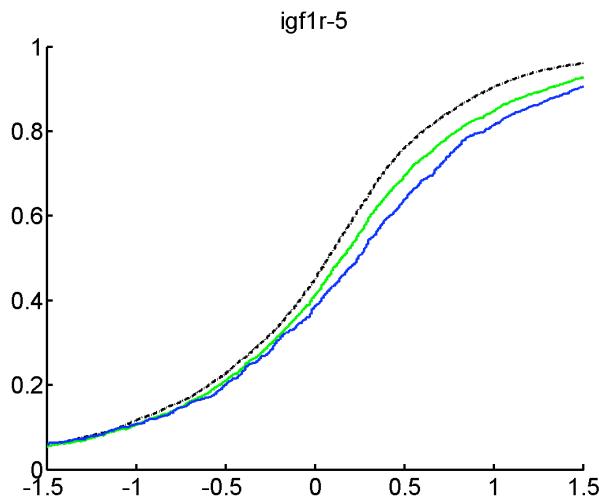
Experiment: igf1r-4

mi/siRNA: IGF1R-4



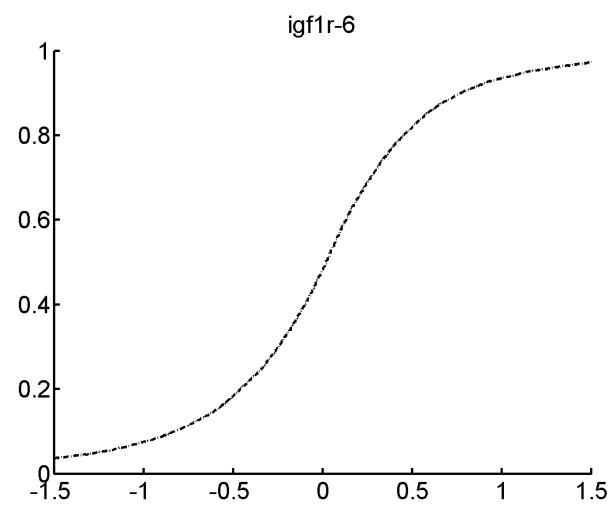
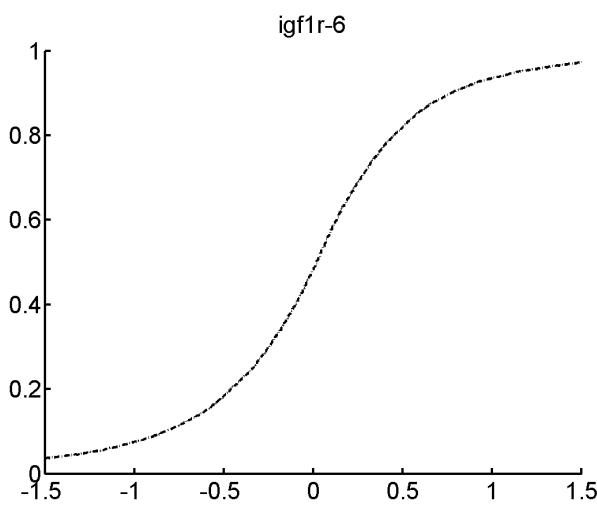
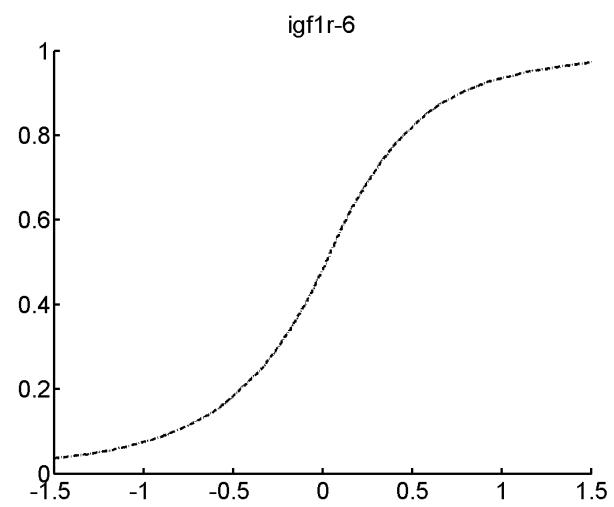
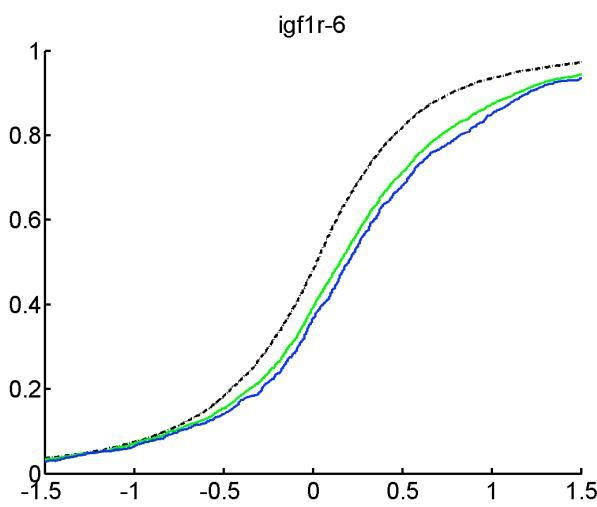
Experiment: igf1r-5

mi/siRNA: IGF1R-5



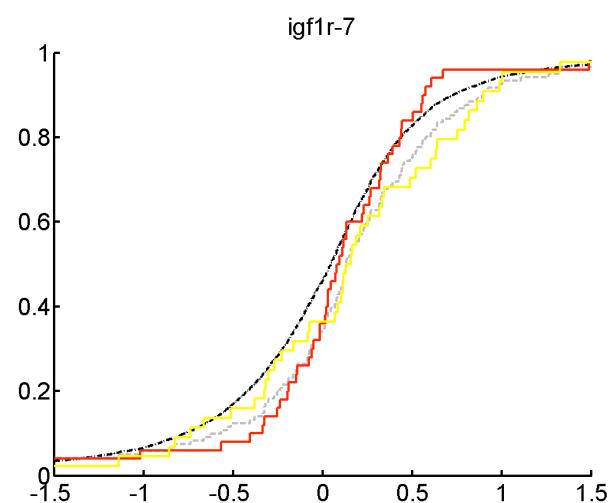
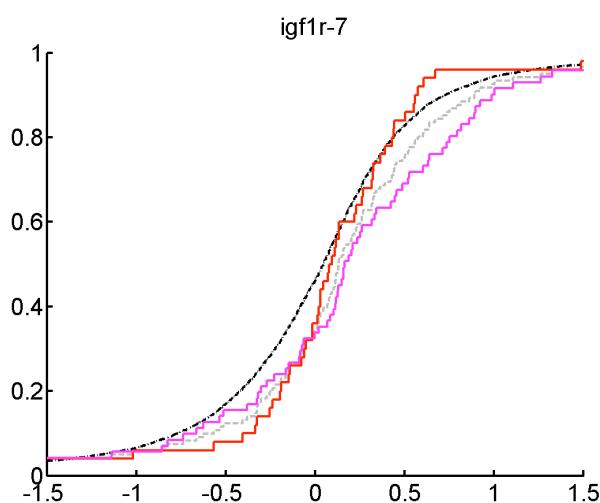
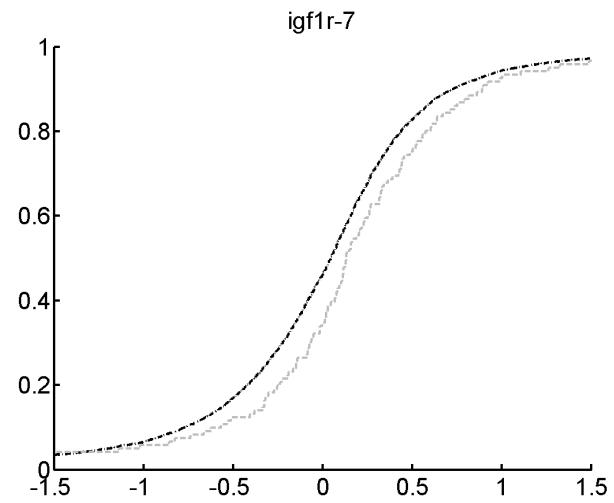
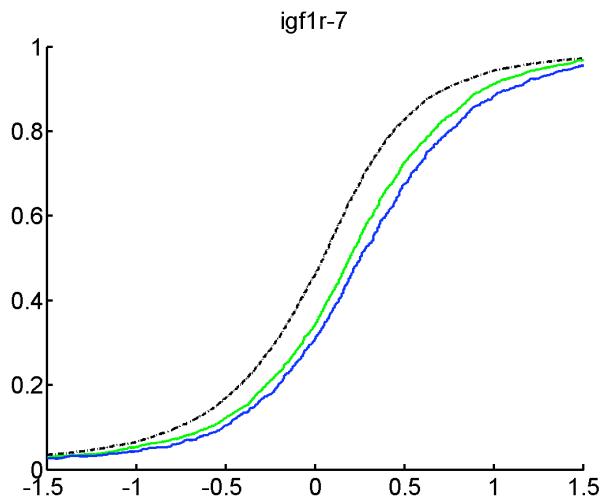
Experiment: igf1r-6

mi/siRNA: IGF1R-6



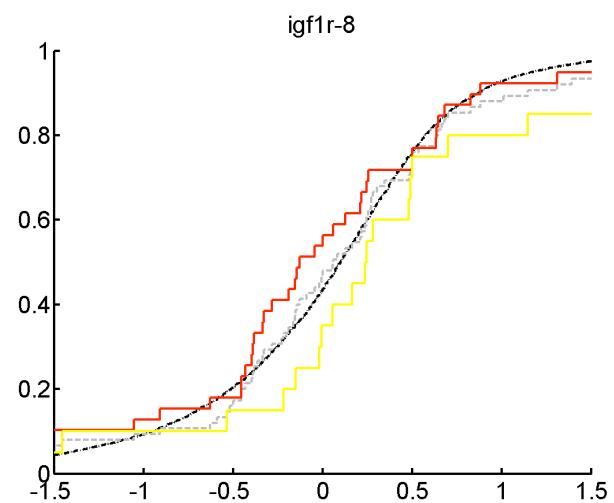
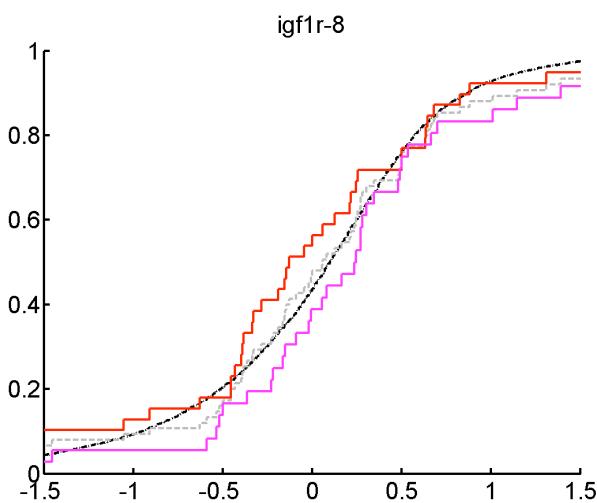
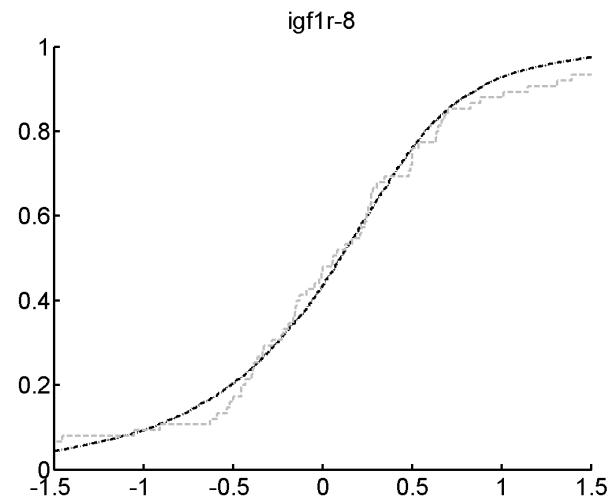
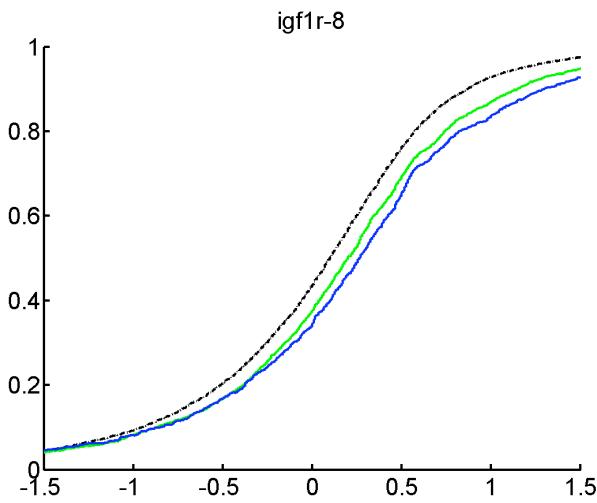
Experiment: igf1r-7

mi/siRNA: IGF1R-7



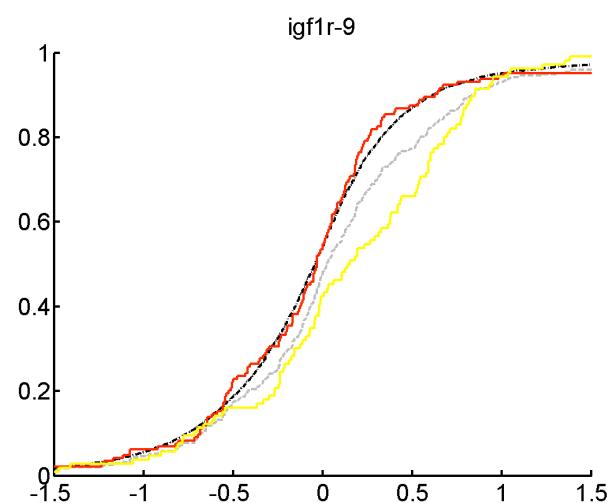
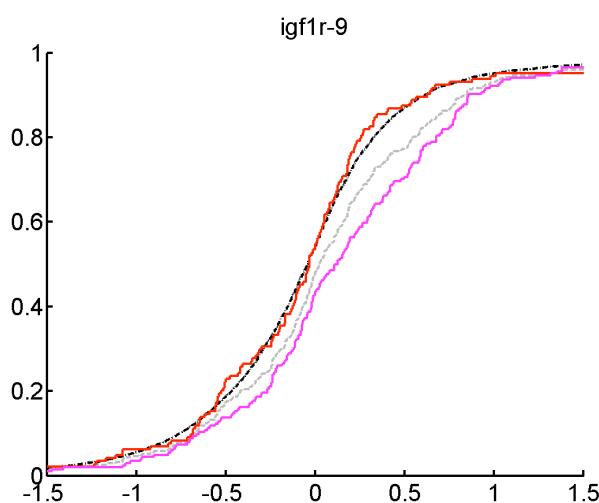
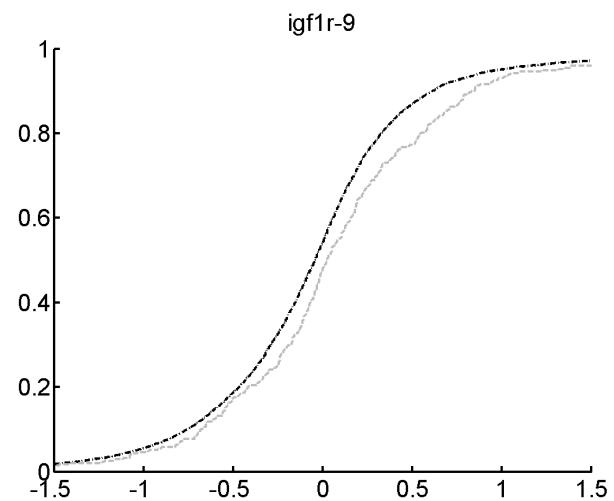
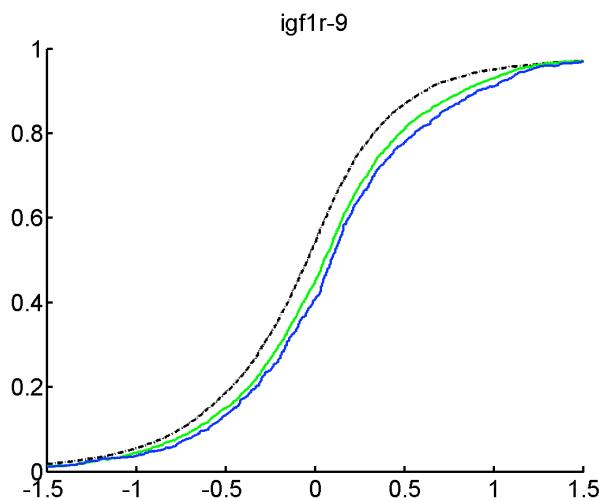
Experiment: igf1r-8

mi/siRNA: IGF1R-8



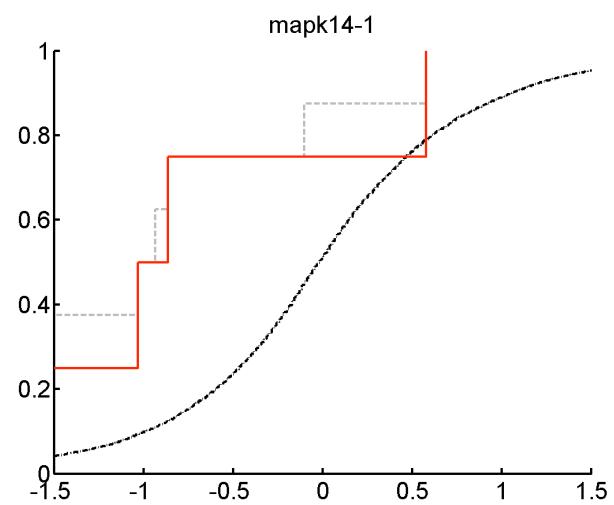
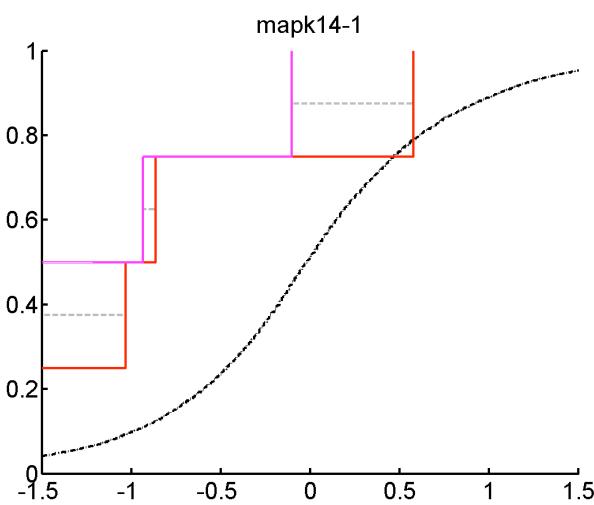
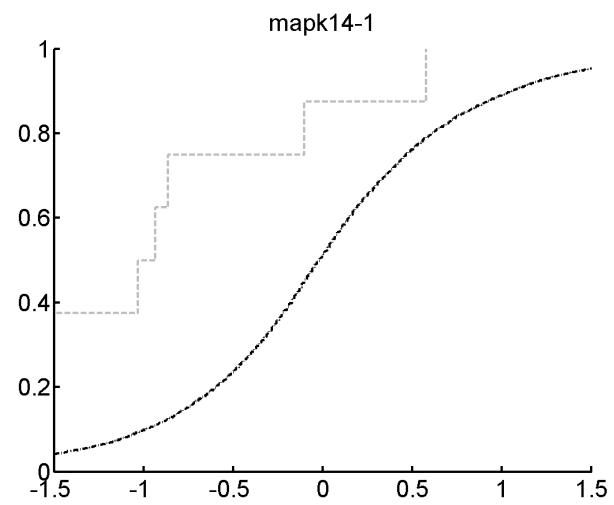
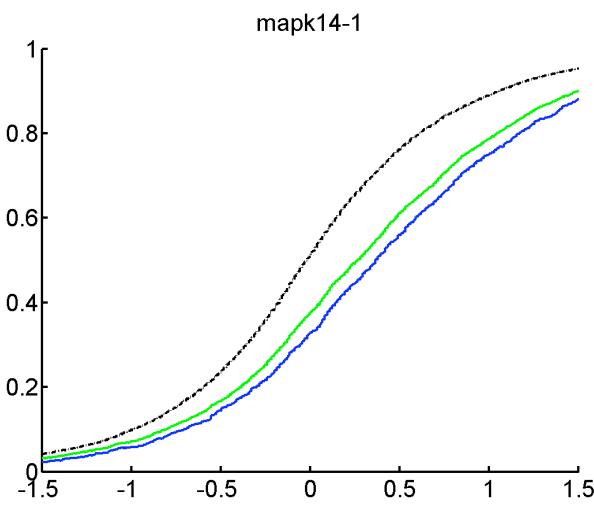
Experiment: igf1r-9

mi/siRNA: IGF1R-9



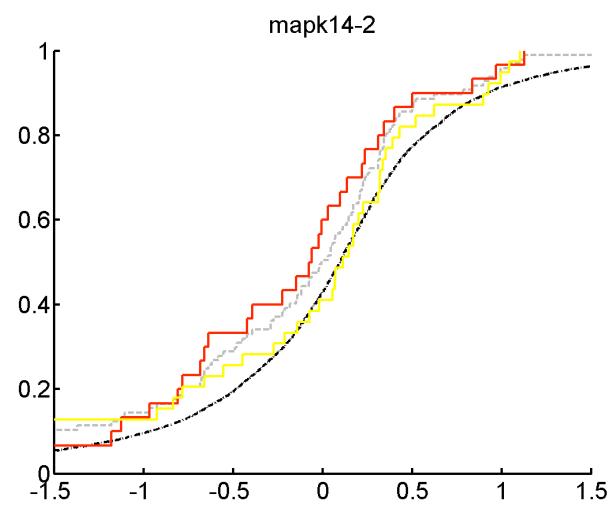
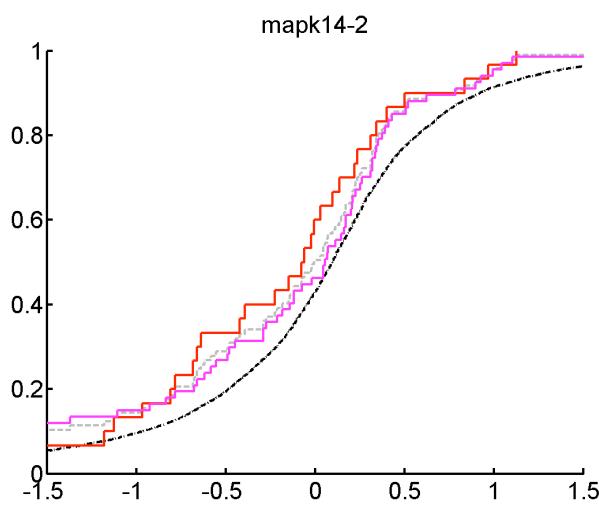
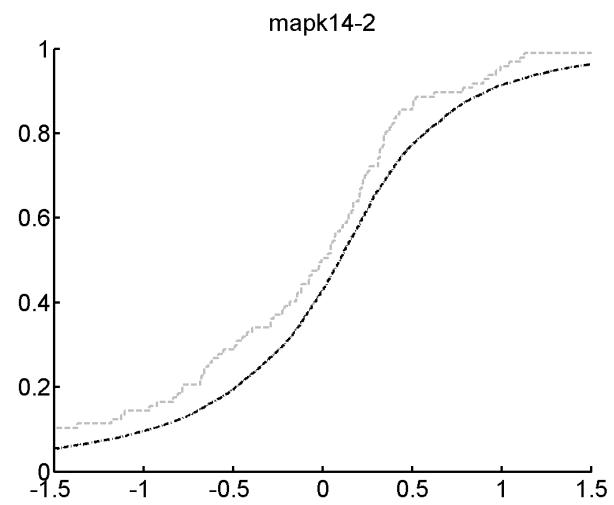
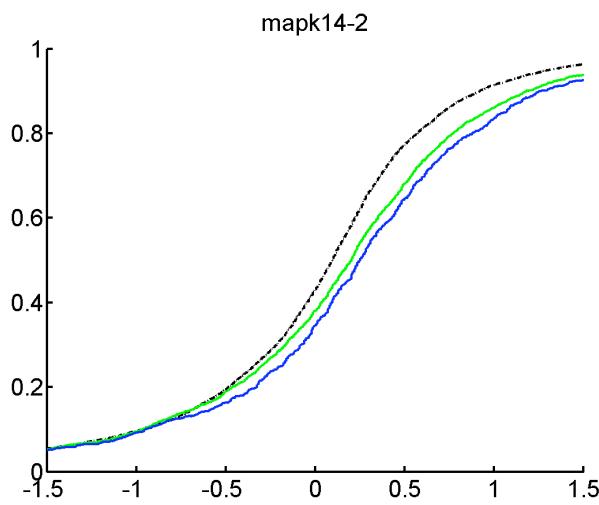
Experiment: mapk14-1

mi/siRNA: MAPK14-1



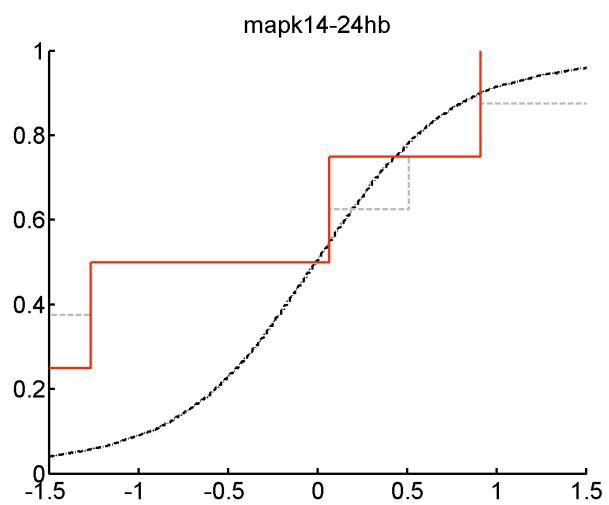
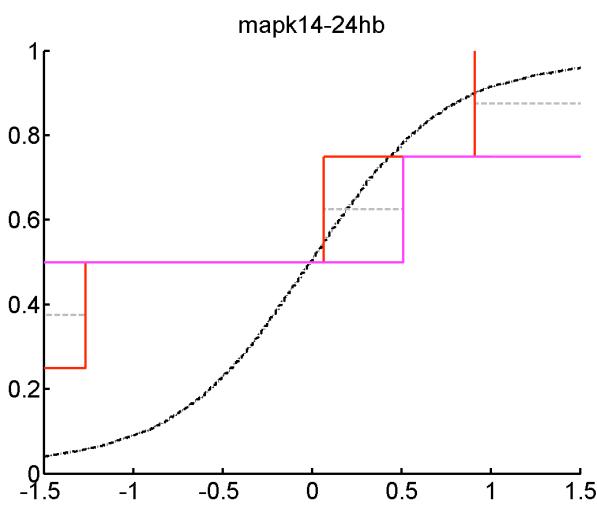
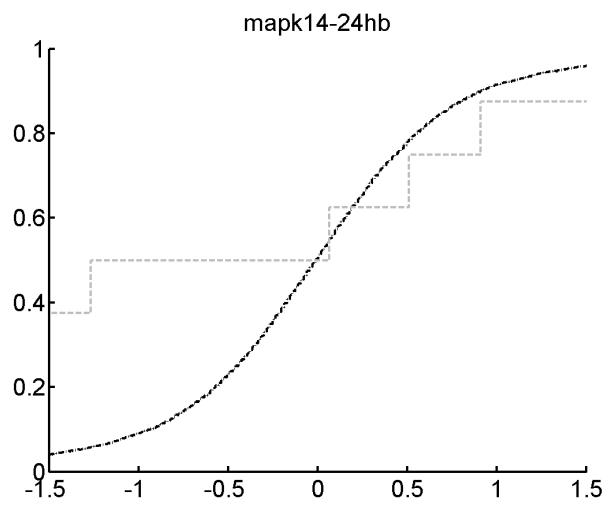
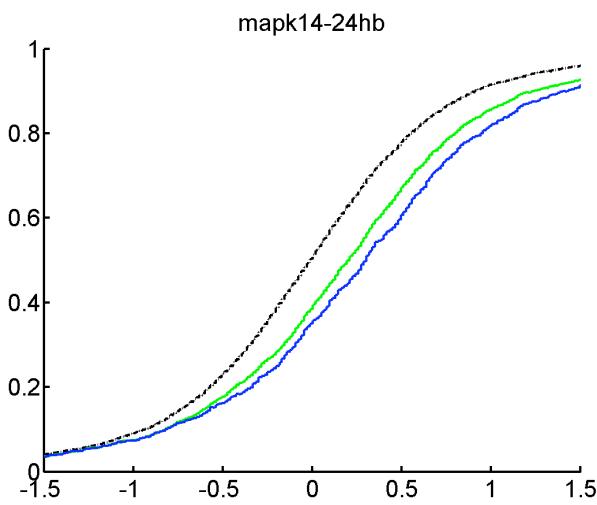
Experiment: mapk14-2

mi/siRNA: MAPK14-2



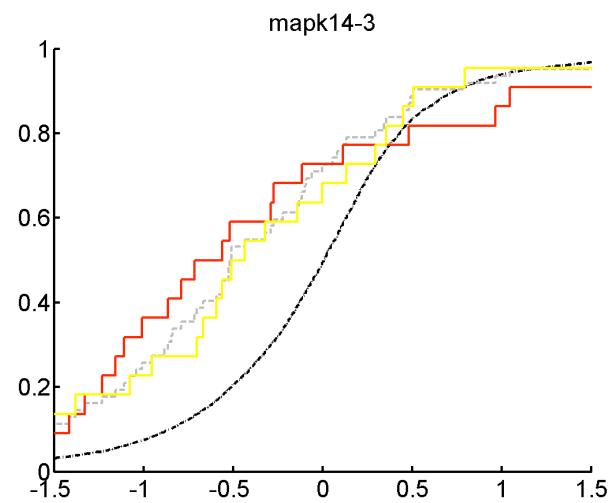
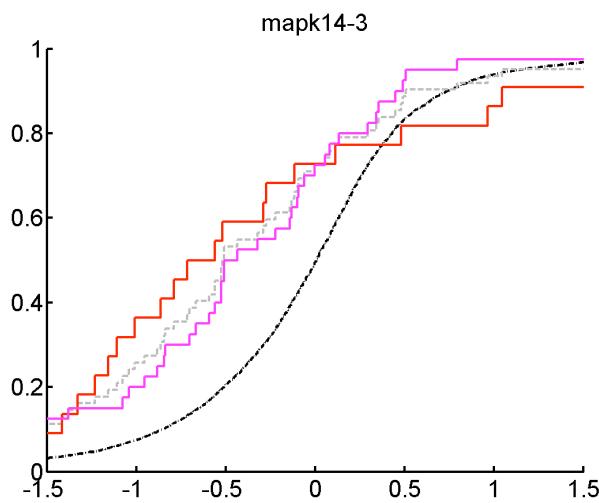
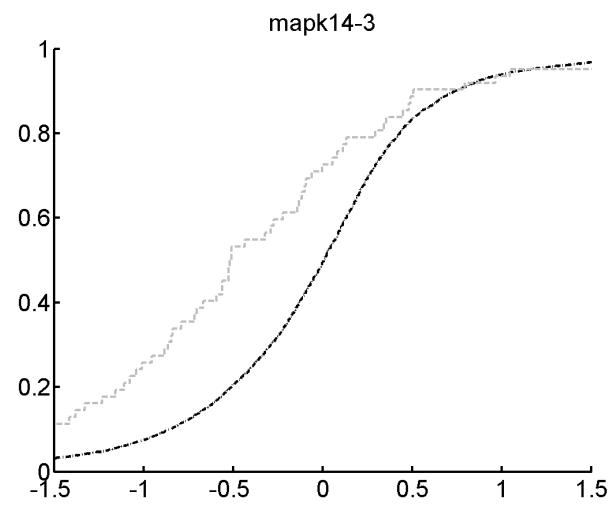
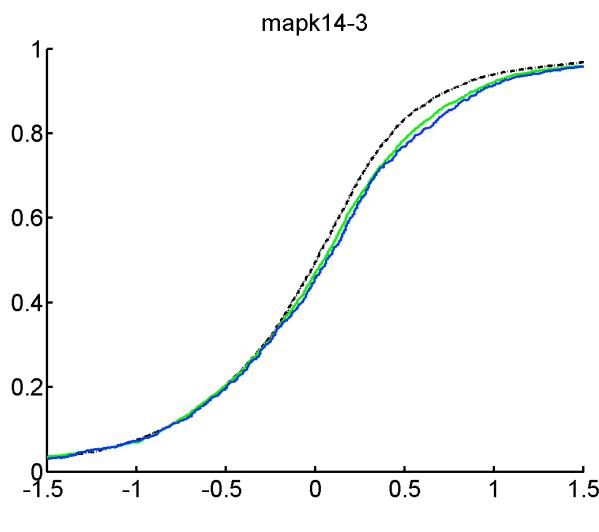
Experiment: mapk14-24hb

mi/siRNA: MAPK14-24hour



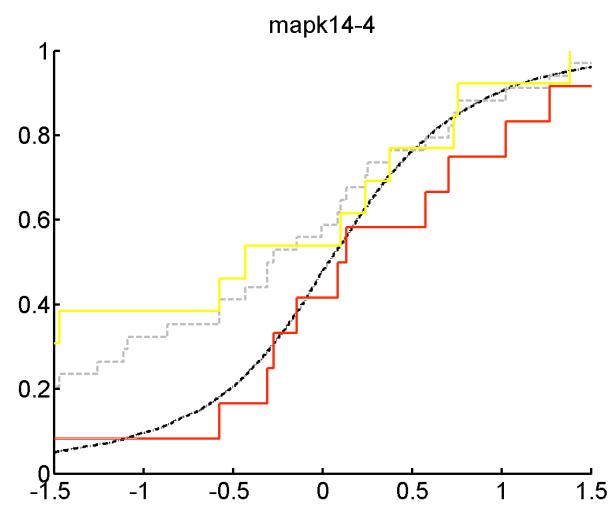
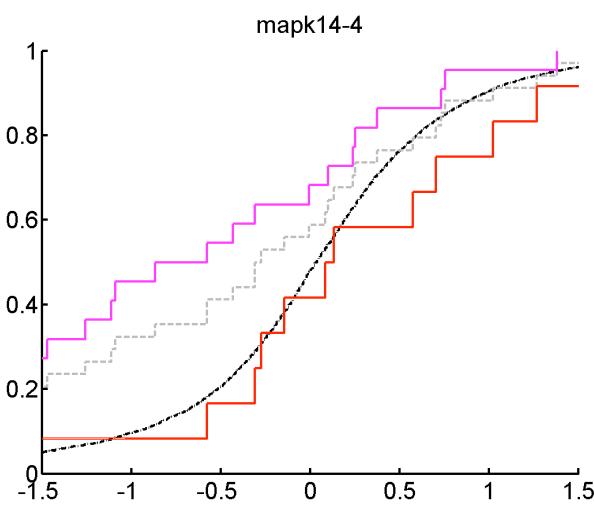
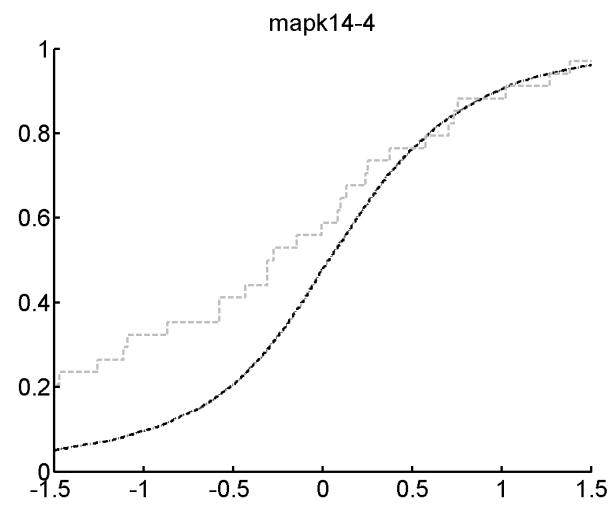
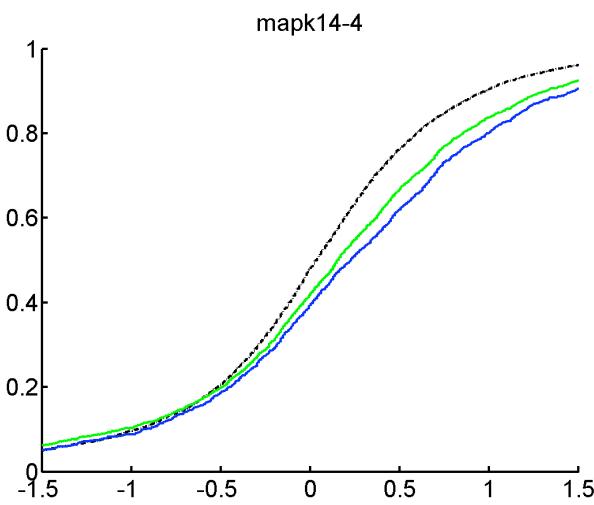
Experiment: mapk14-3

mi/siRNA: MAPK14-3



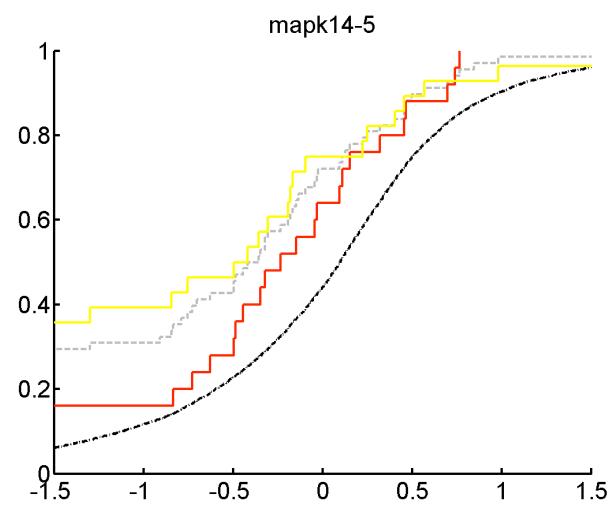
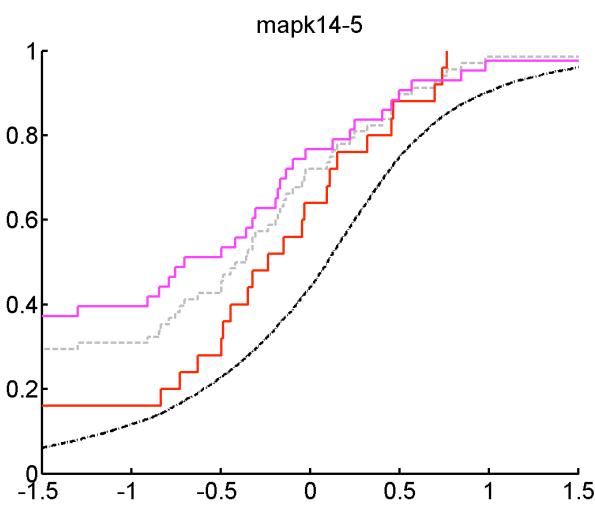
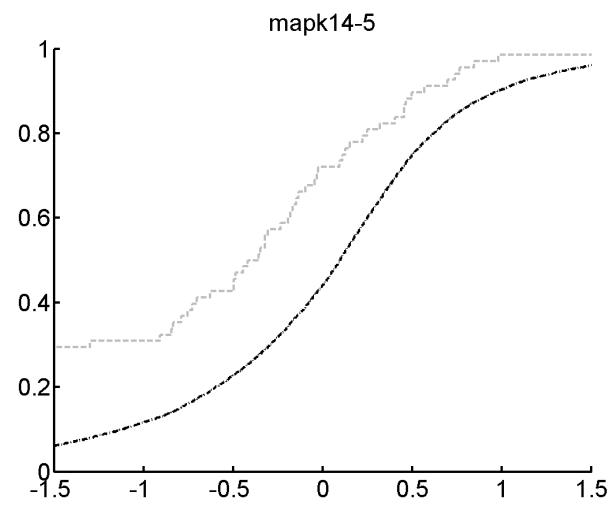
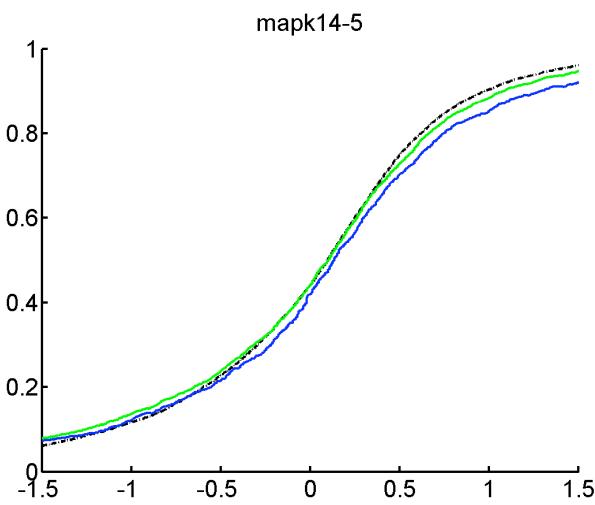
Experiment: mapk14-4

mi/siRNA: MAPK14-4



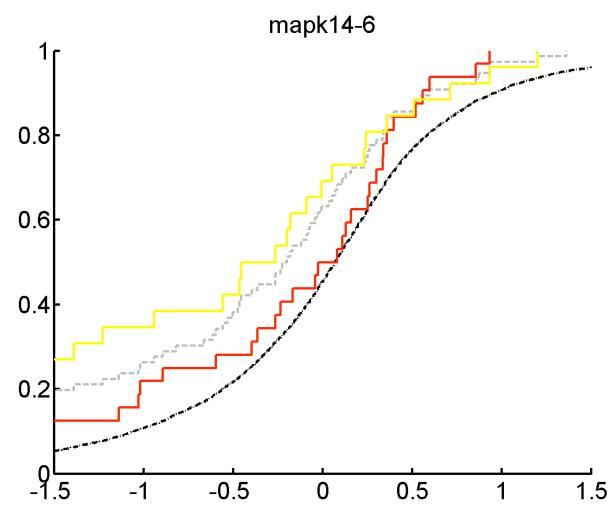
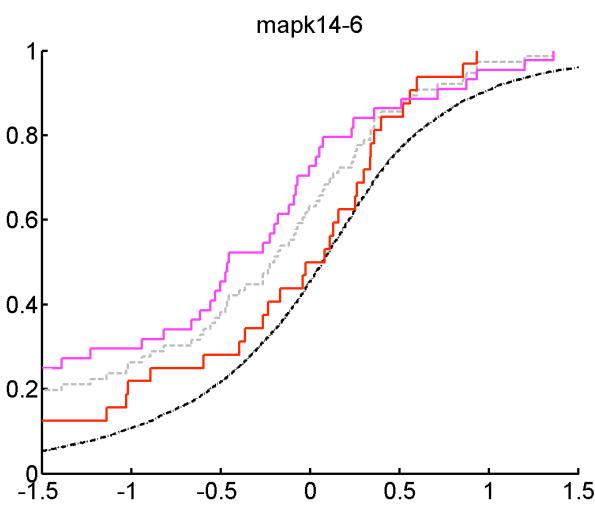
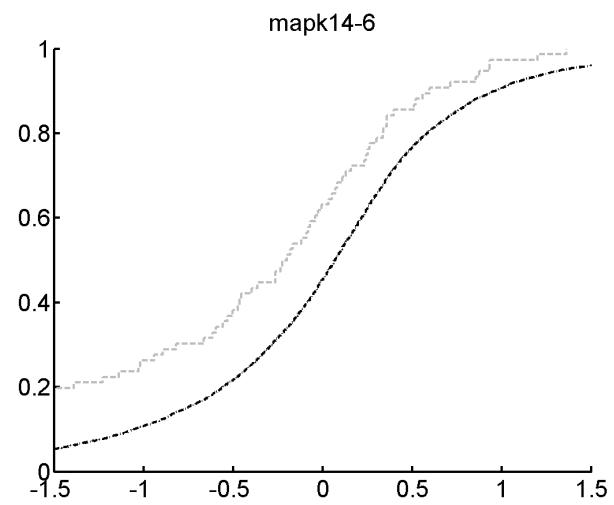
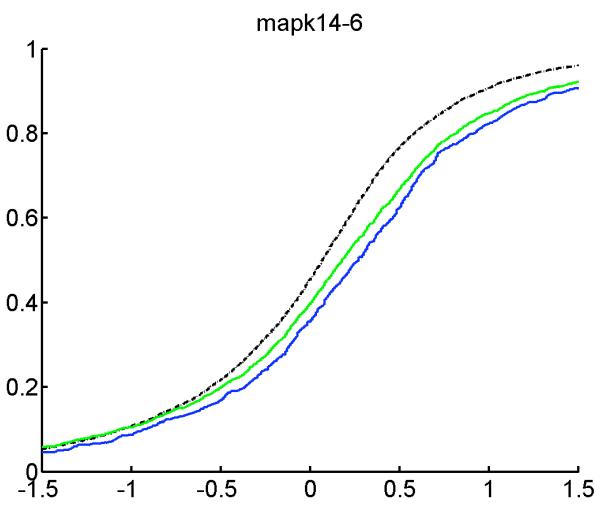
Experiment: mapk14-5

mi/siRNA: MAPK14-5



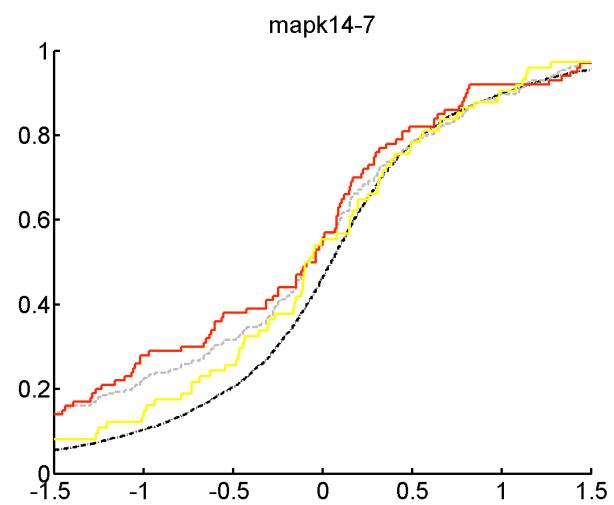
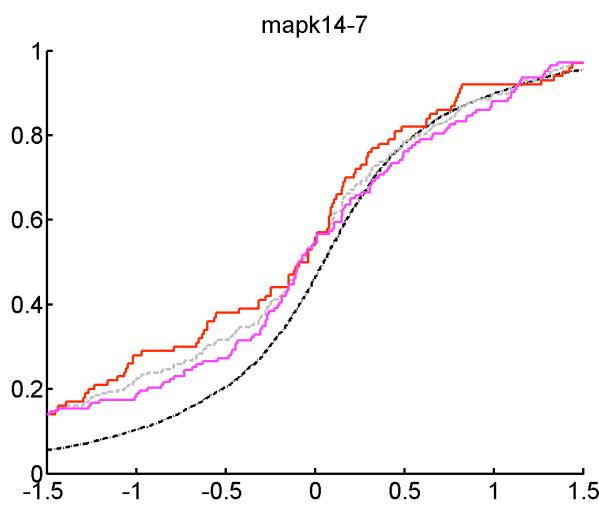
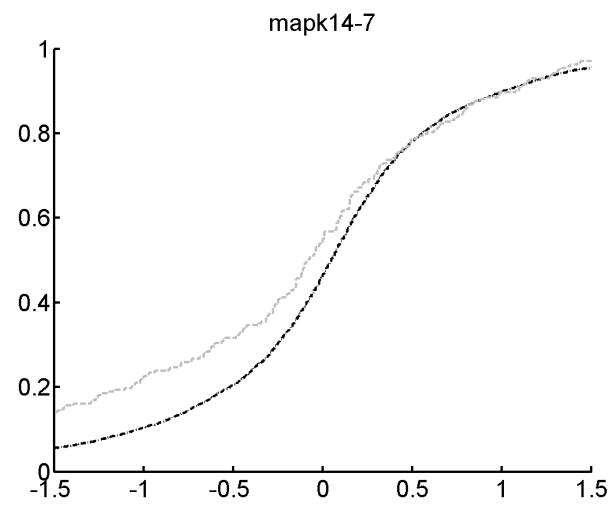
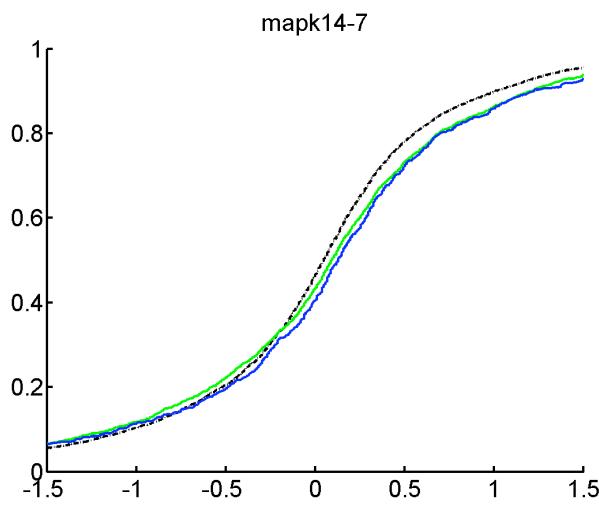
Experiment: mapk14-6

mi/siRNA: MAPK14-6



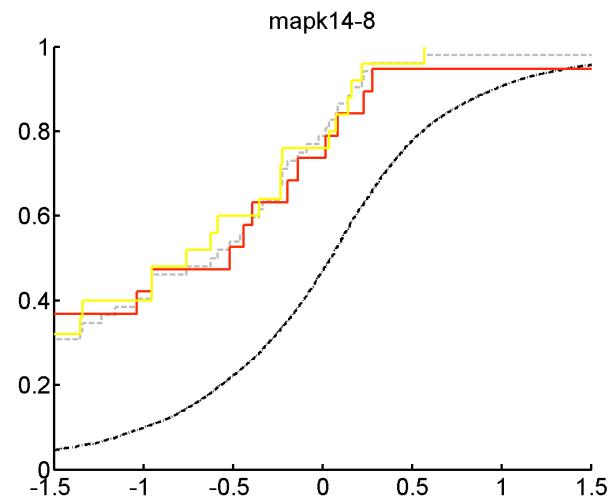
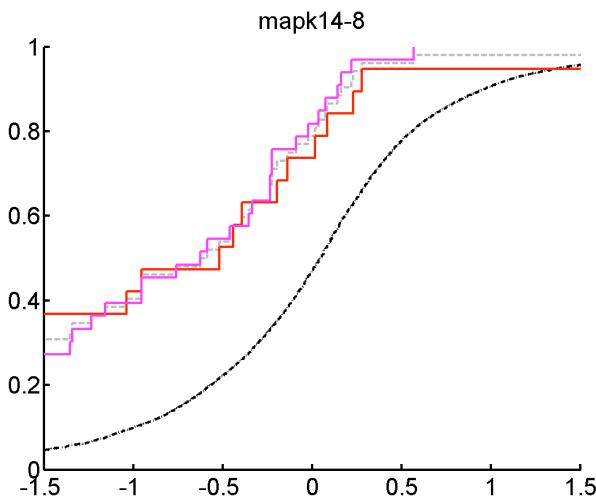
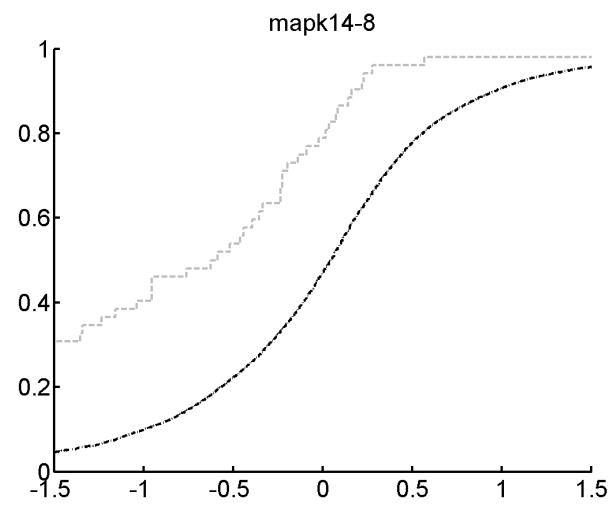
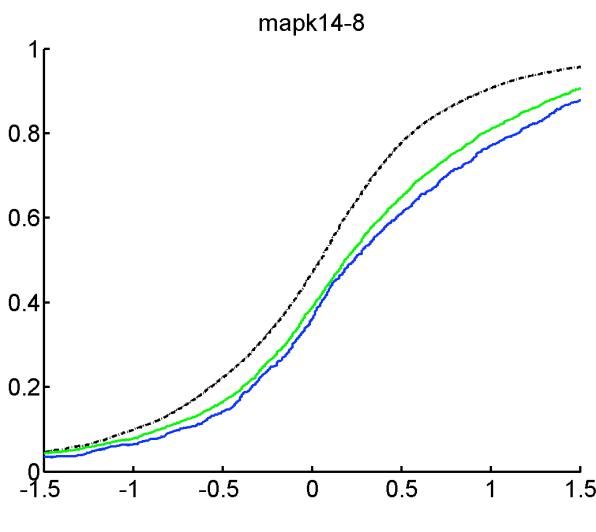
Experiment: mapk14-7

mi/siRNA: MAPK14-7



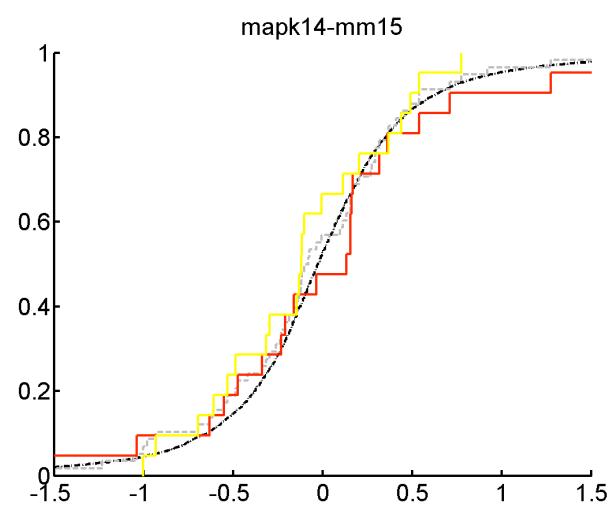
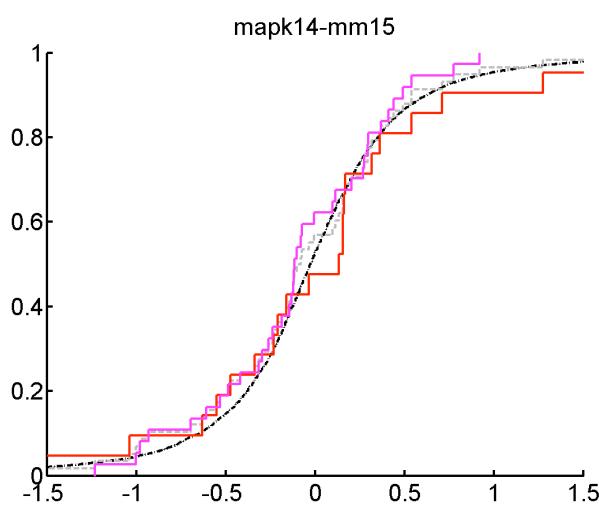
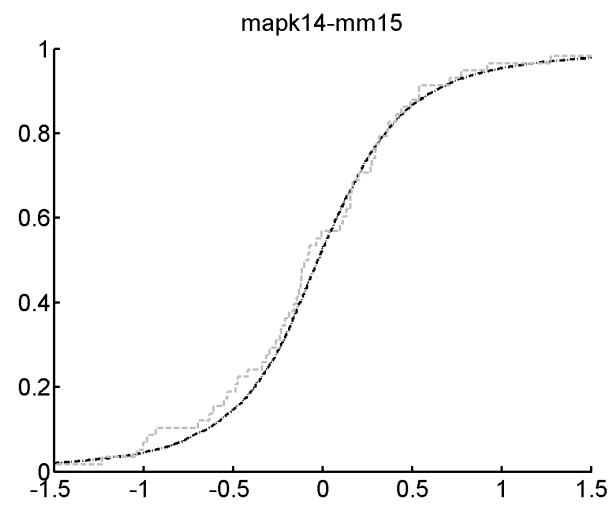
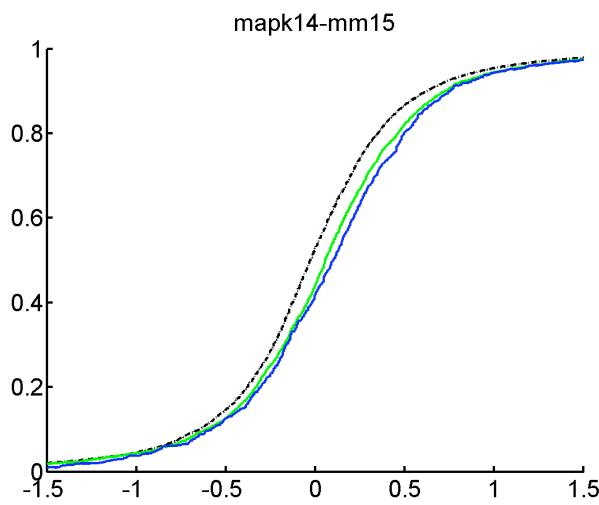
Experiment: mapk14-8

mi/siRNA: MAPK14-8



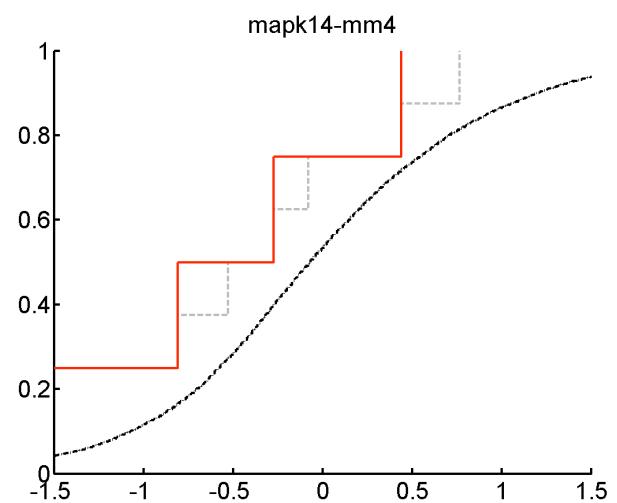
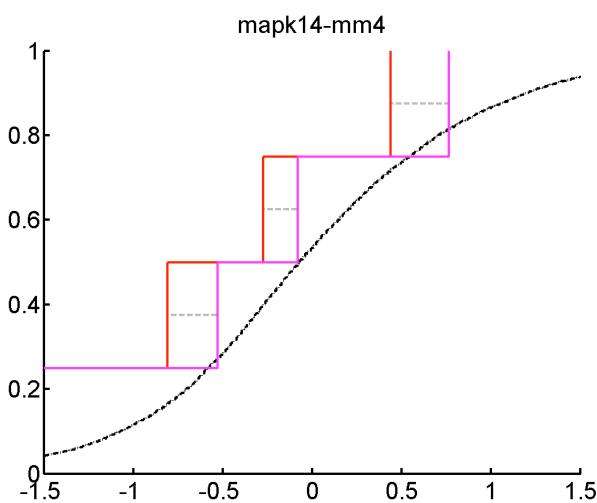
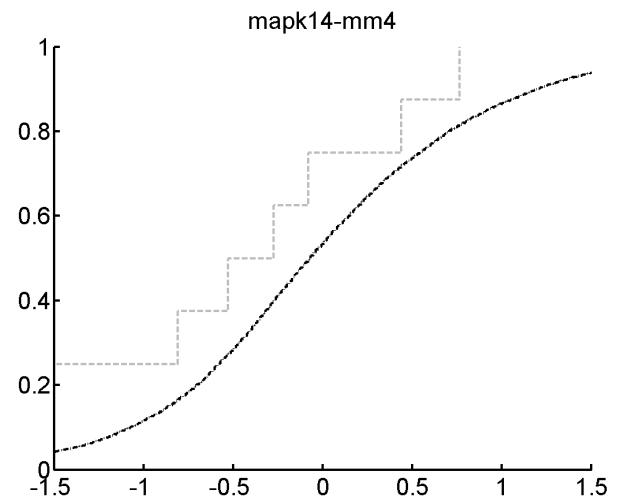
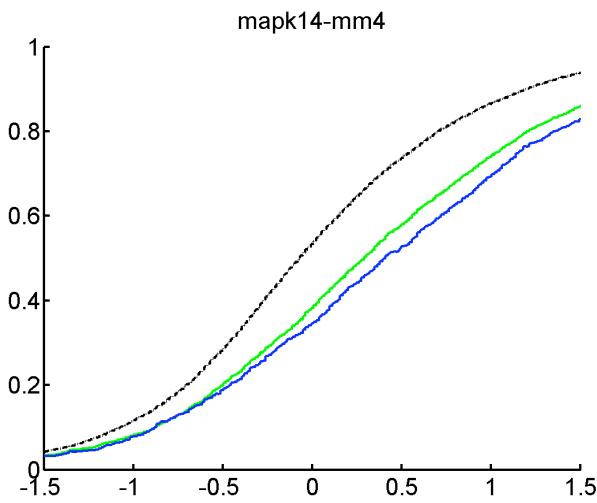
Experiment: mapk14-mm15

mi/siRNA: MAPK14-mis15



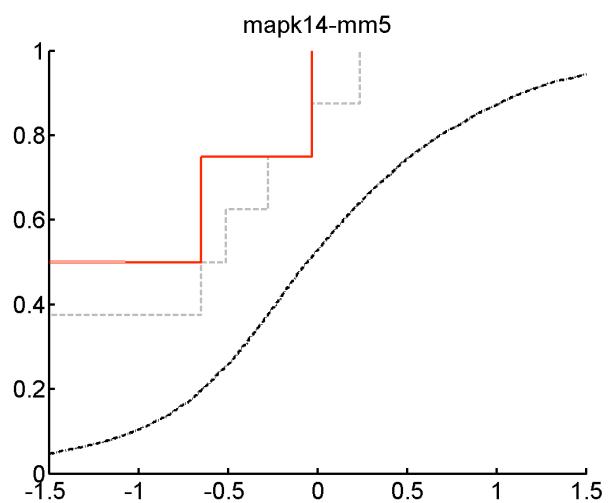
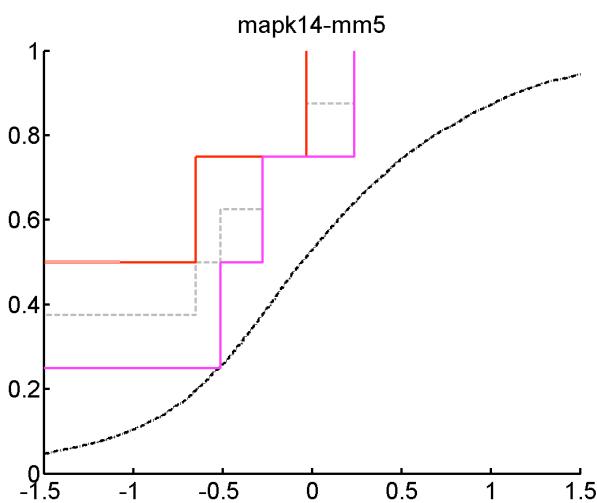
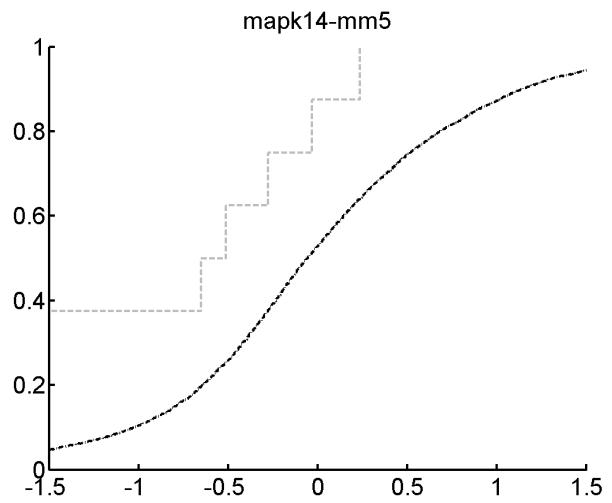
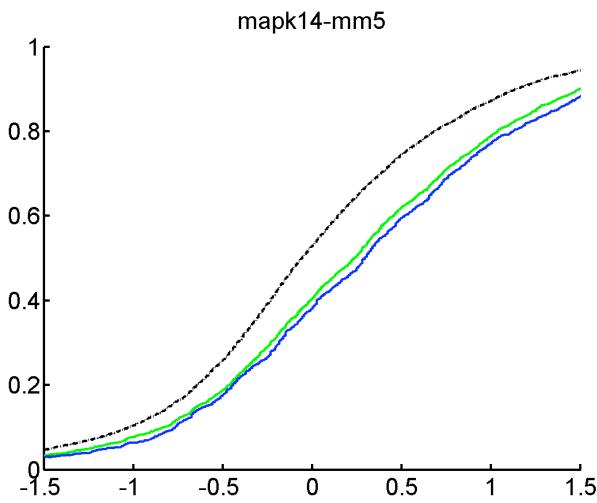
Experiment: mapk14-mm4

mi/siRNA: MAPK14-mis4



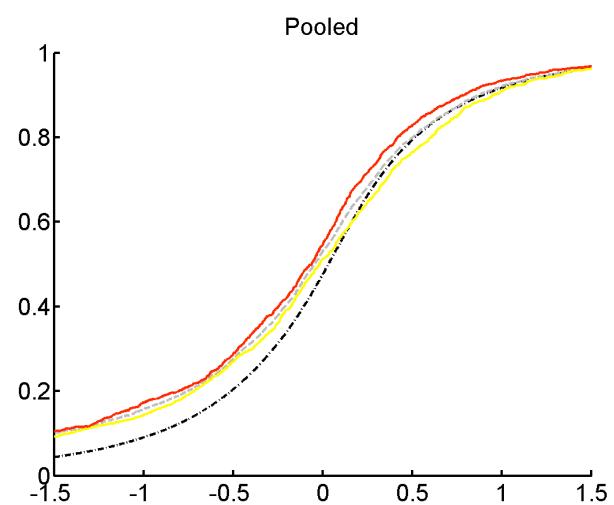
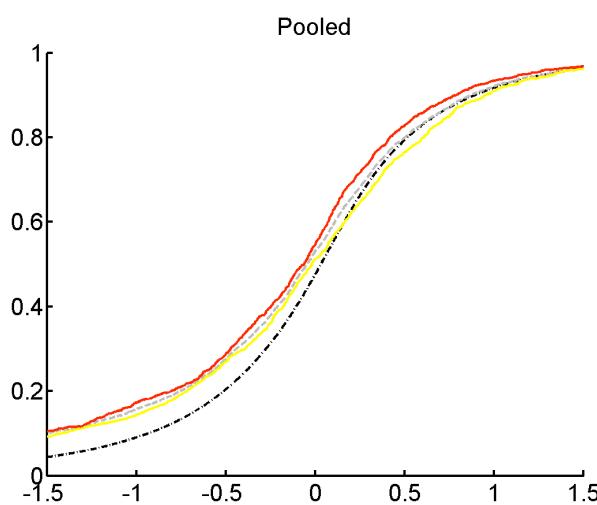
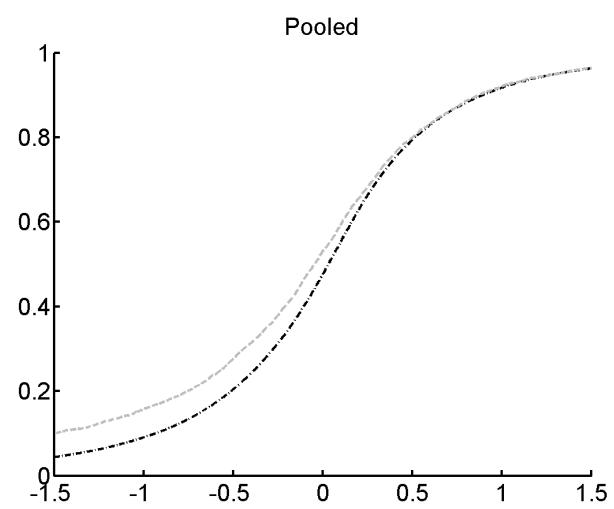
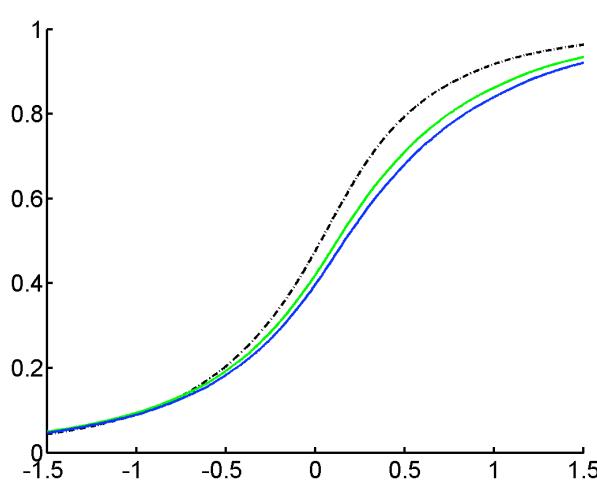
Experiment: mapk14-mm5

mi/siRNA: MAPK14-mis5



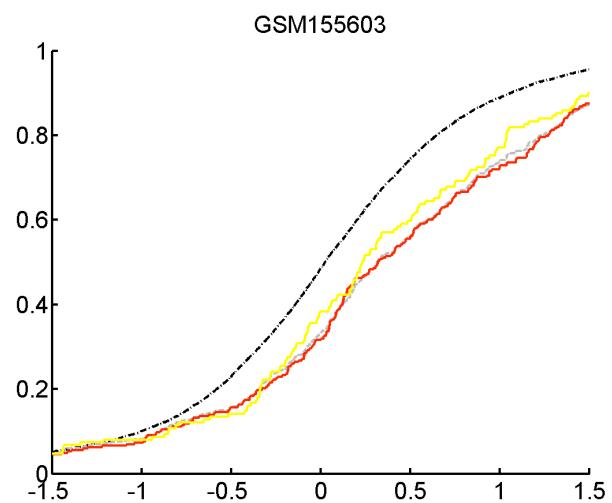
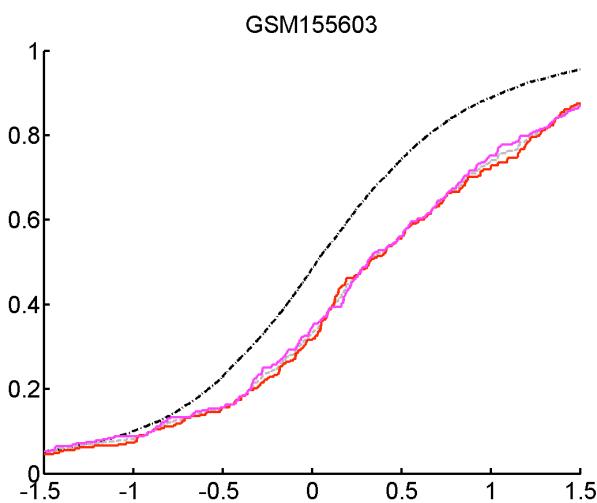
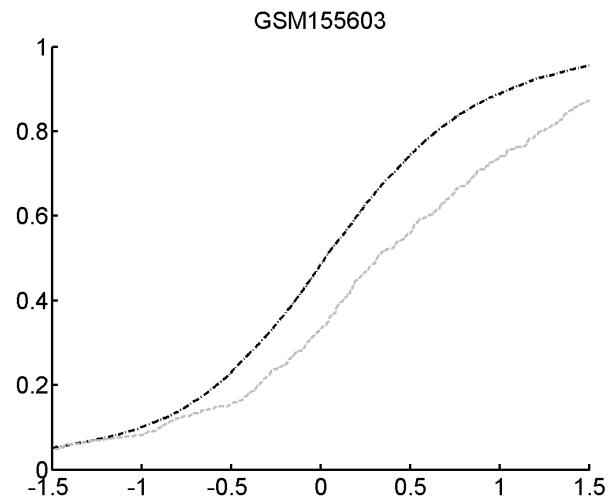
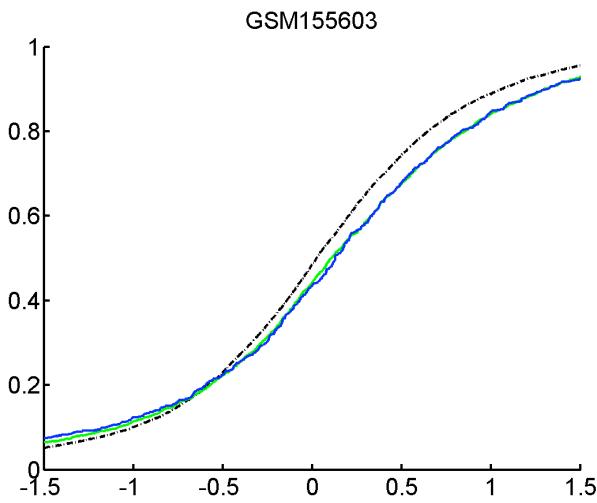
Experiment: sirna

mi/siRNA: pooled



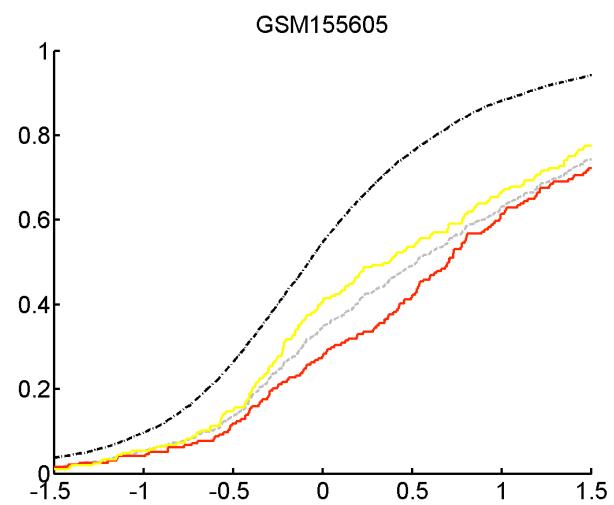
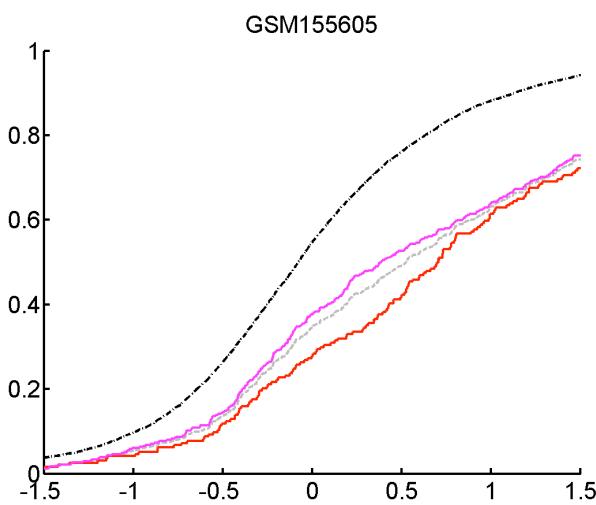
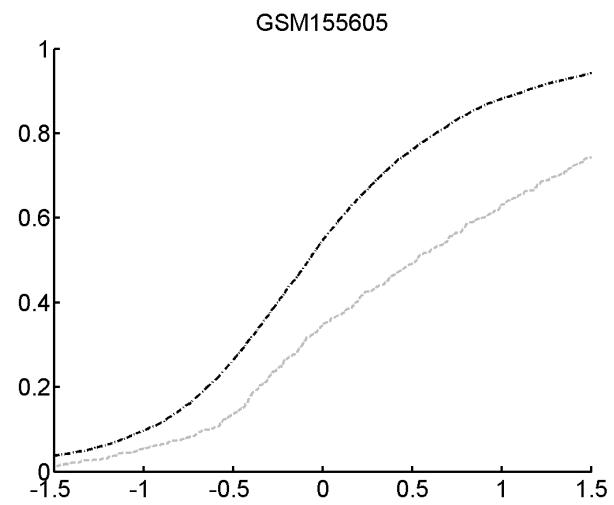
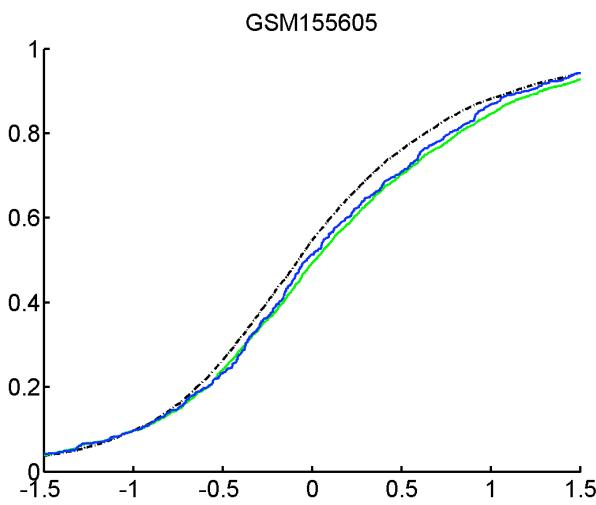
Experiment: GSM155603

mi/siRNA: miR-16-2-OME



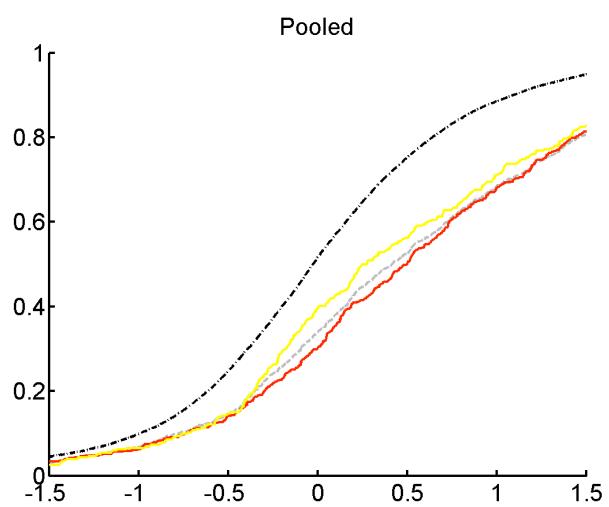
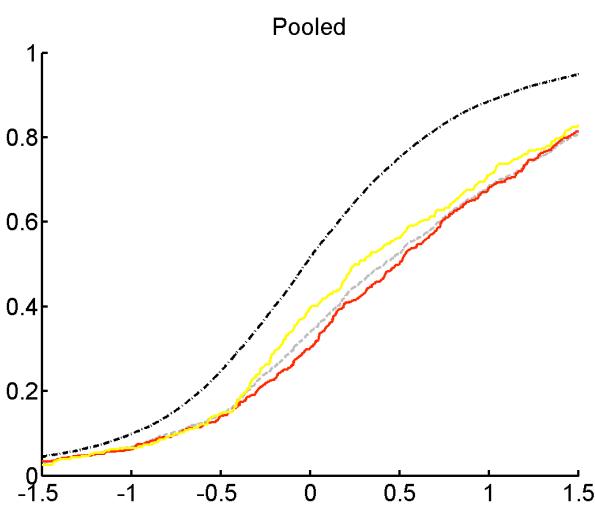
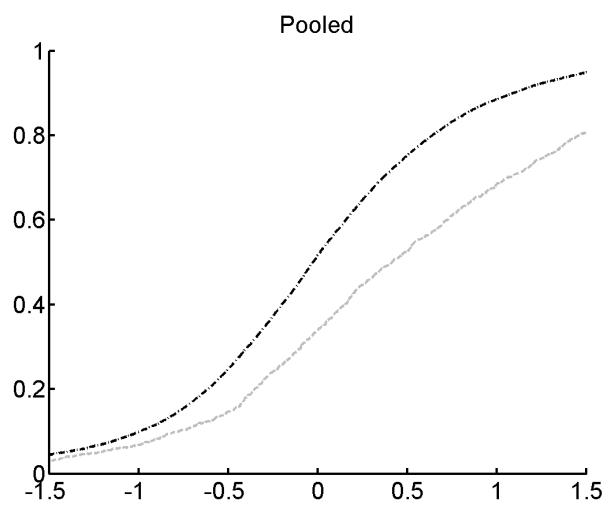
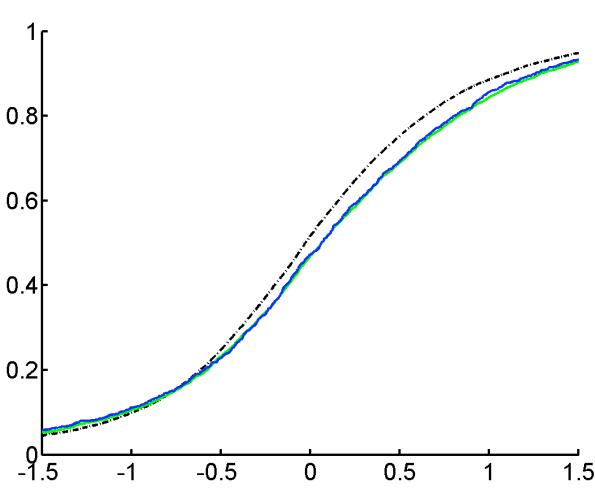
Experiment: GSM155605

mi/siRNA: miR-106b-2-OME



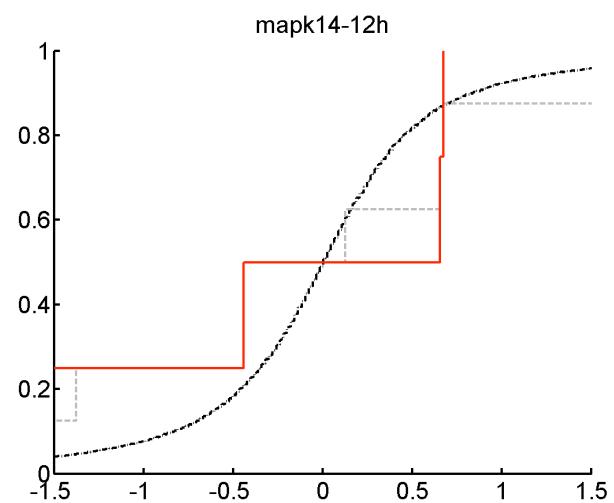
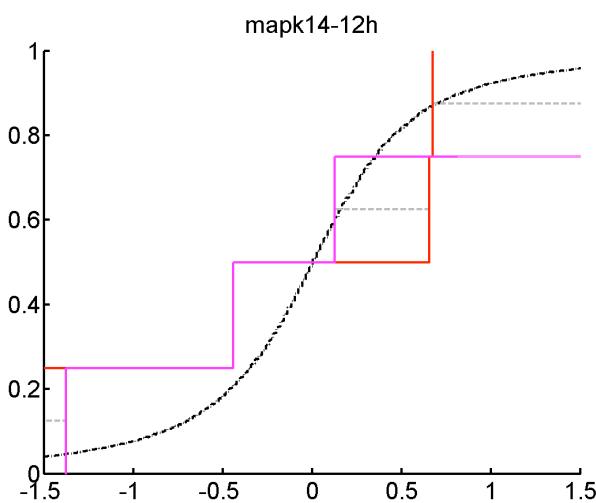
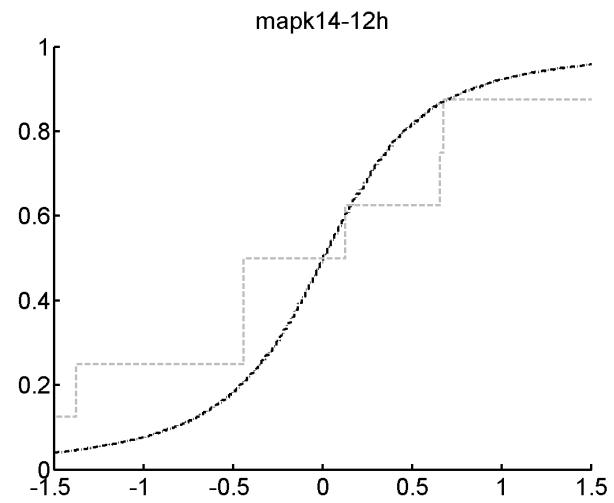
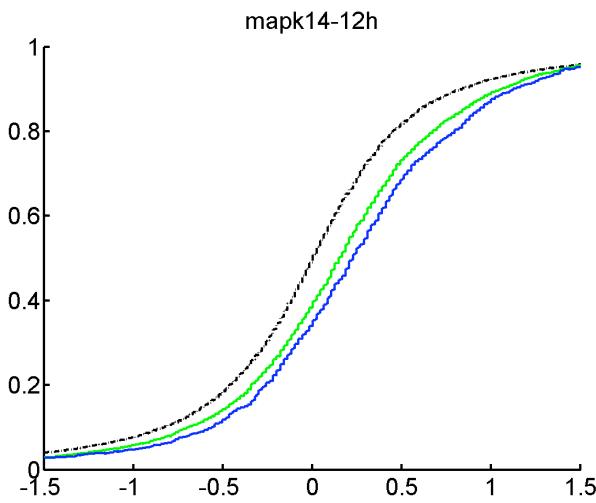
Experiment: ome

mi/siRNA: pooled



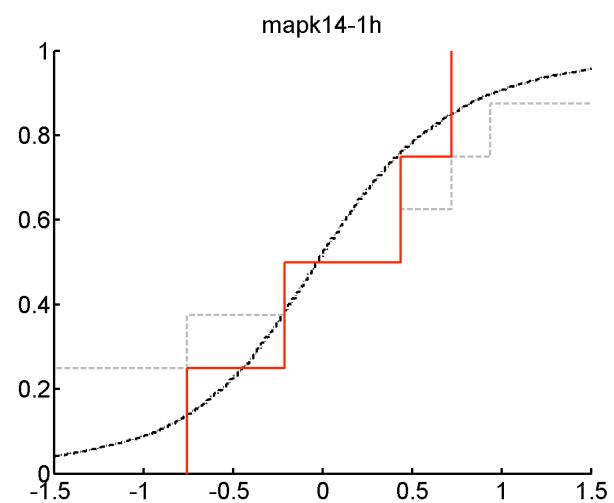
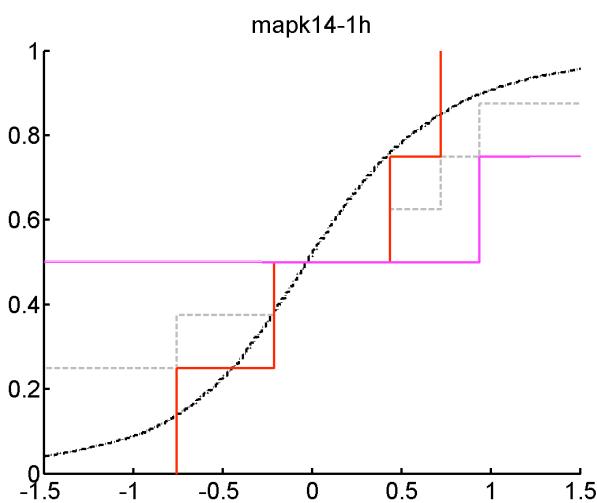
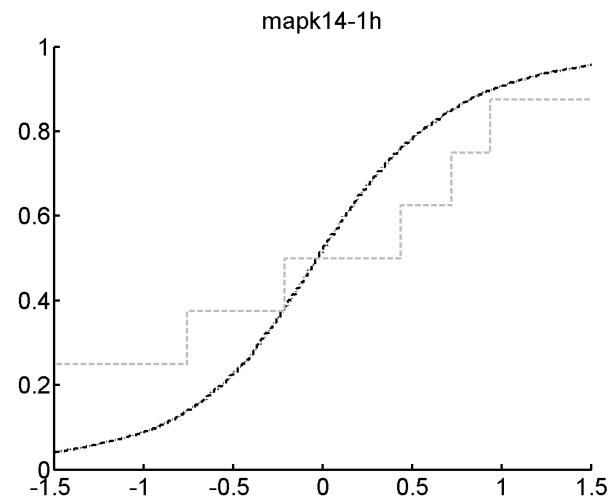
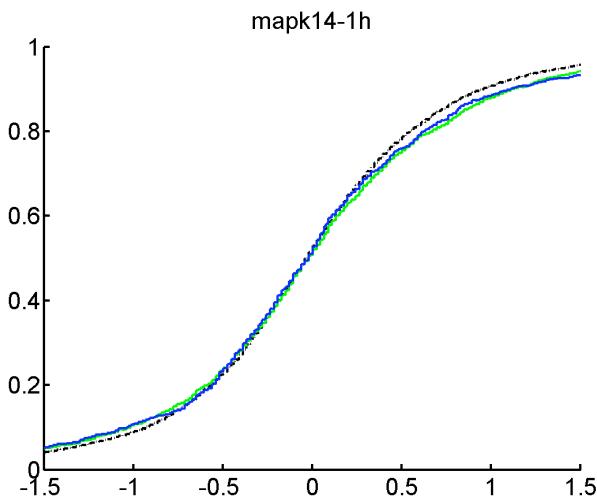
Experiment: mapk14-12h

mi/siRNA: MAPK14



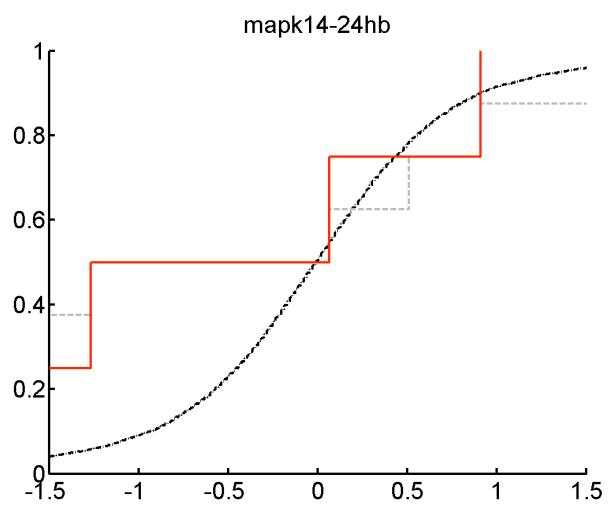
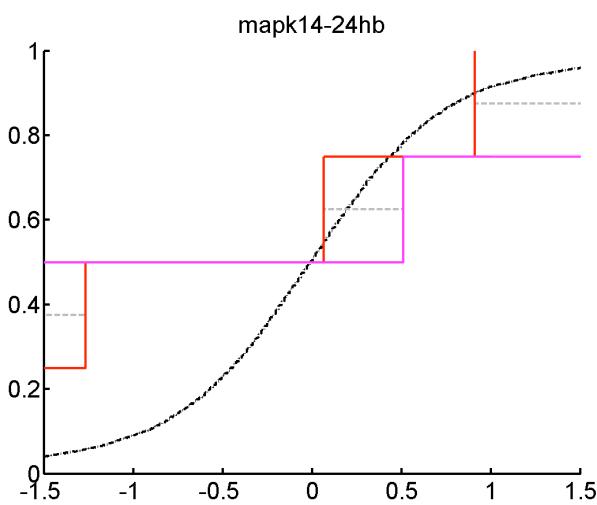
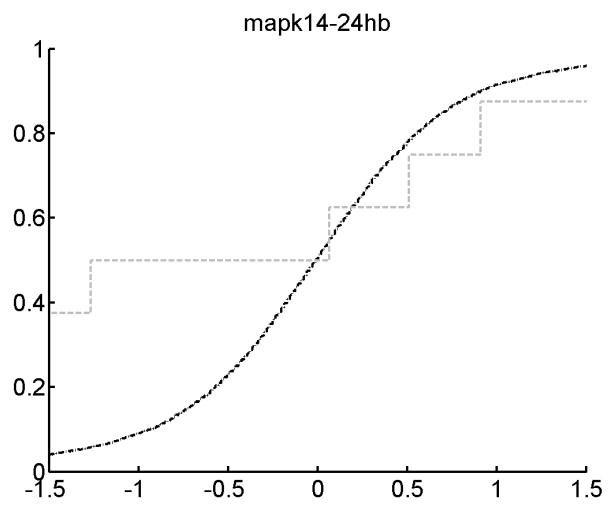
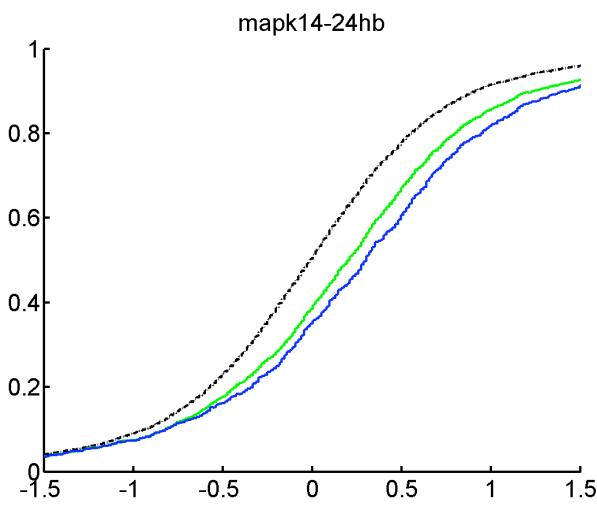
Experiment: mapk14-1h

mi/siRNA: MAPK14



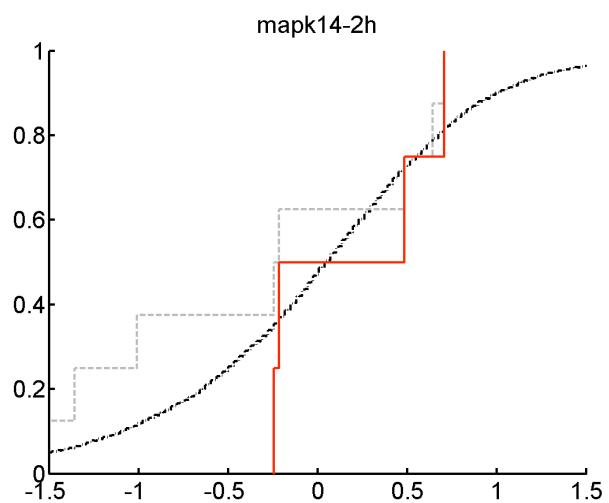
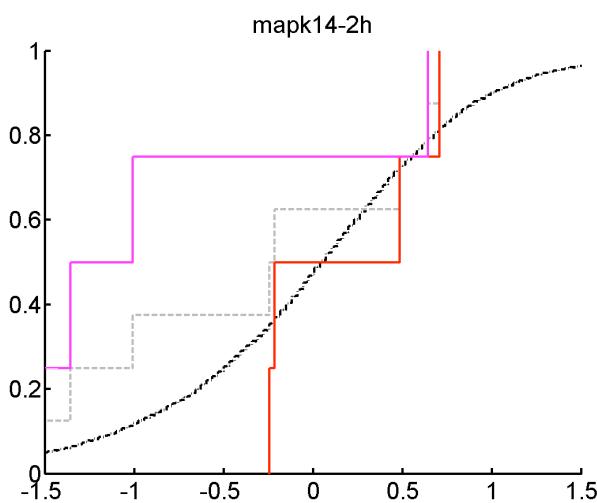
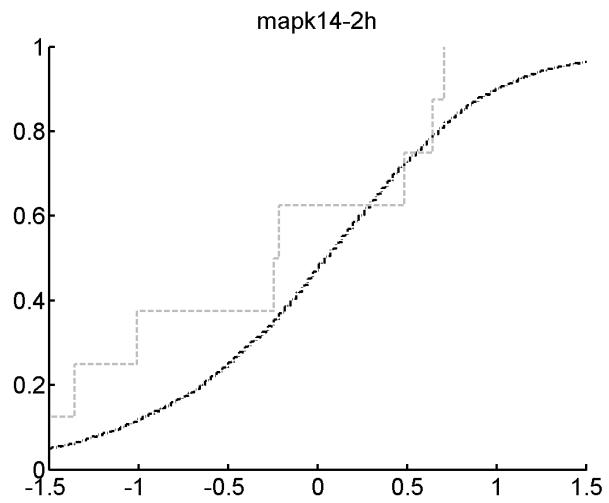
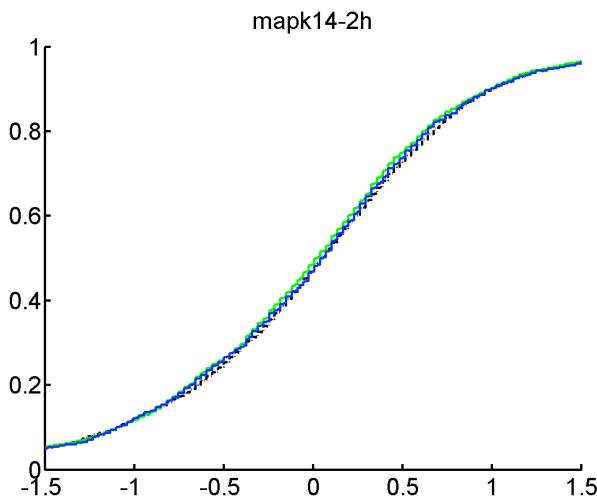
Experiment: mapk14-24hb

mi/siRNA: MAPK14



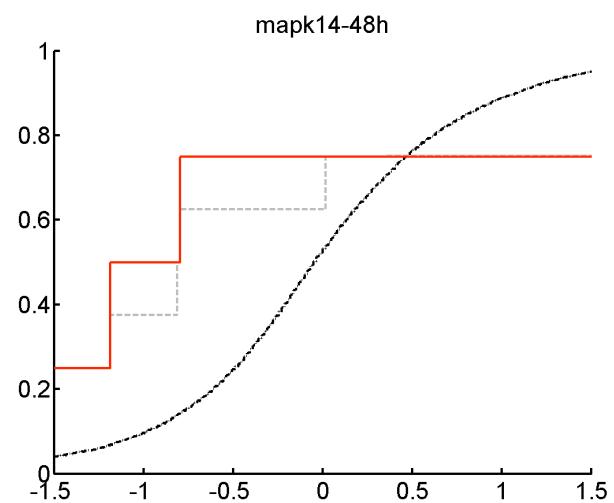
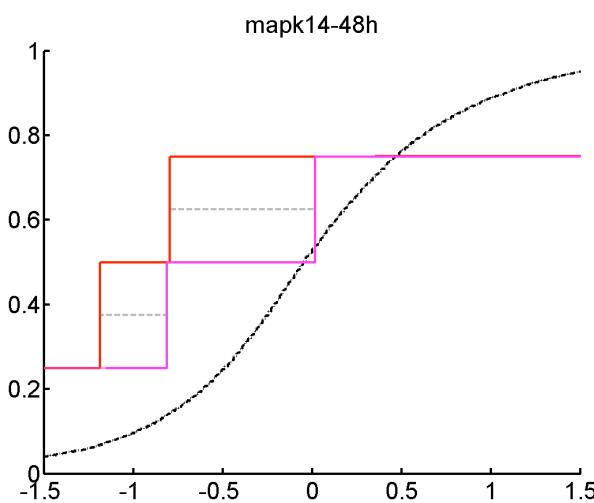
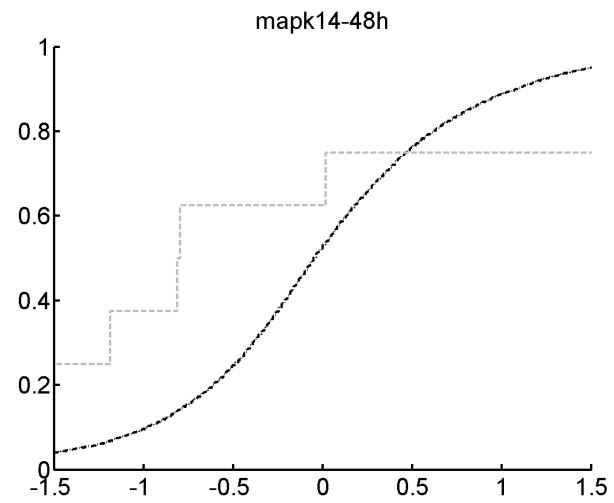
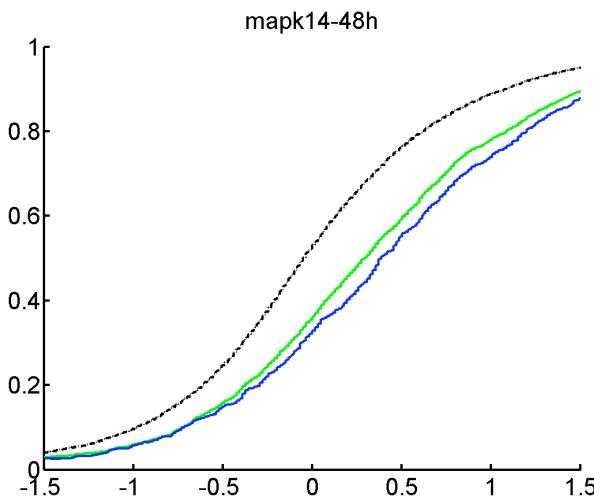
Experiment: mapk14-2h

mi/siRNA: MAPK14



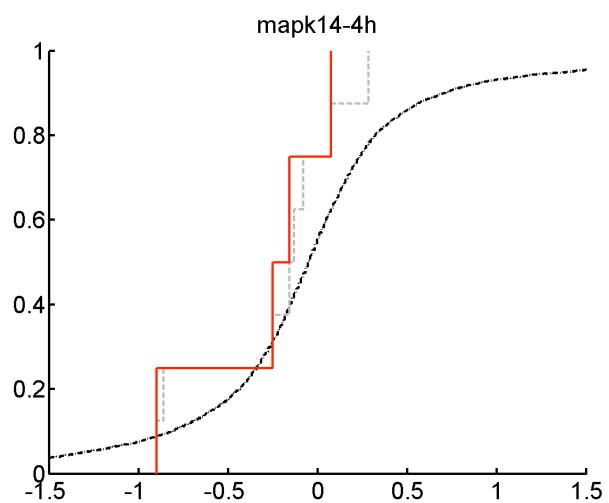
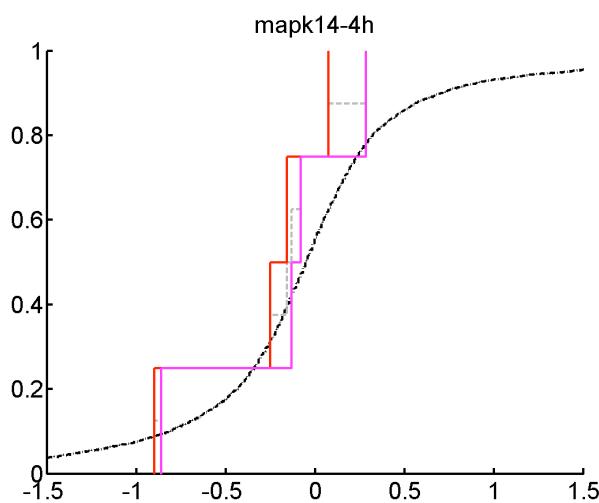
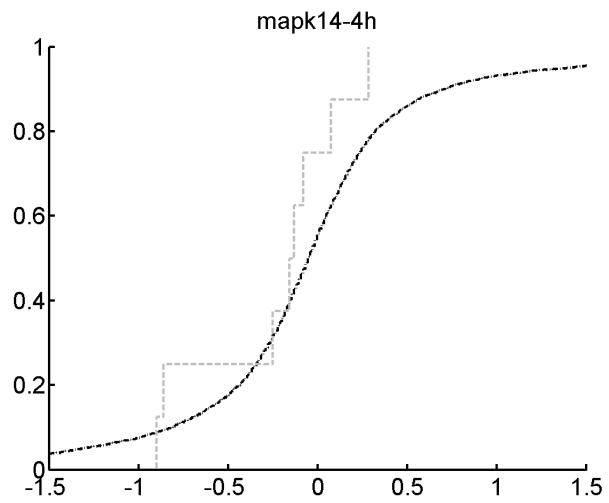
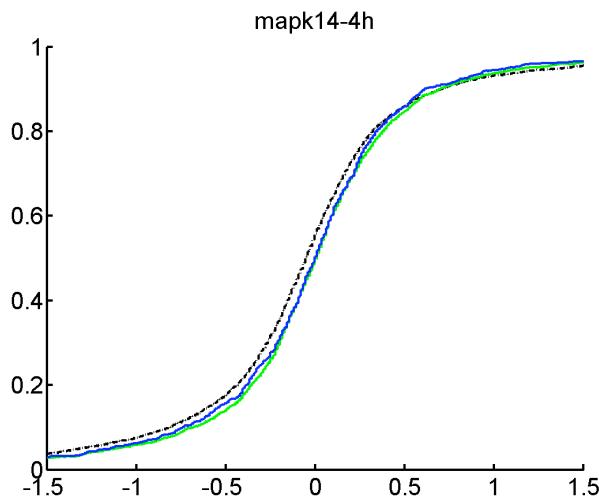
Experiment: mapk14-48h

mi/siRNA: MAPK14



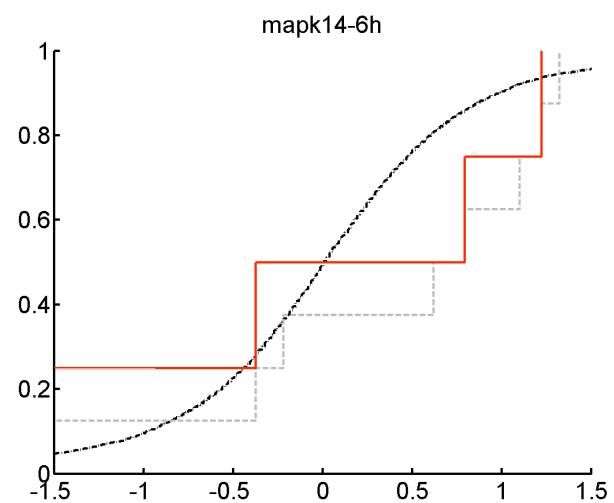
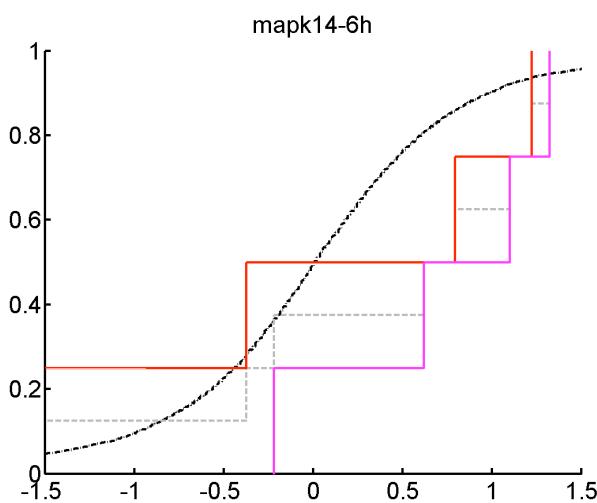
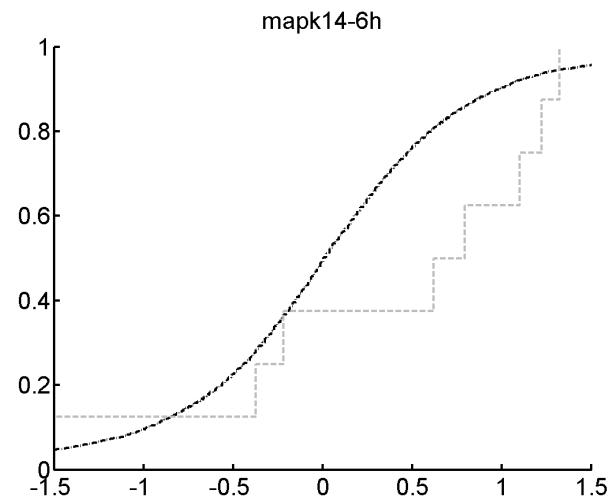
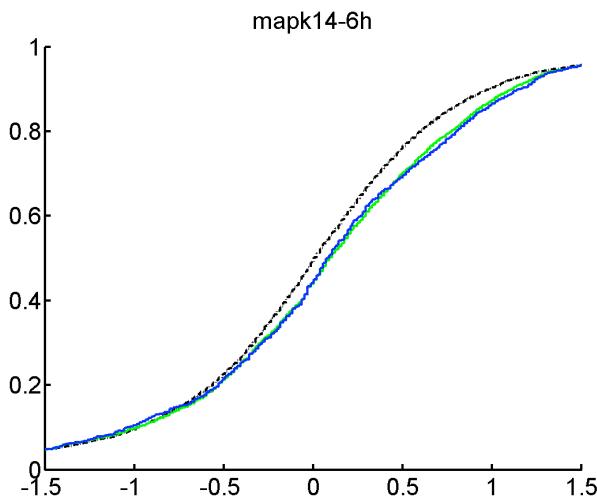
Experiment: mapk14-4h

mi/siRNA: MAPK14



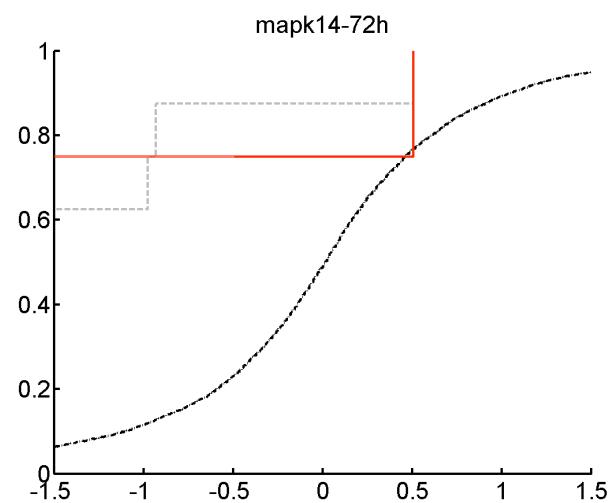
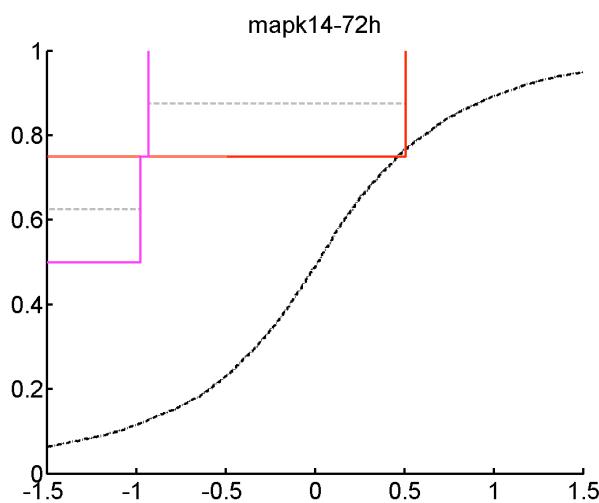
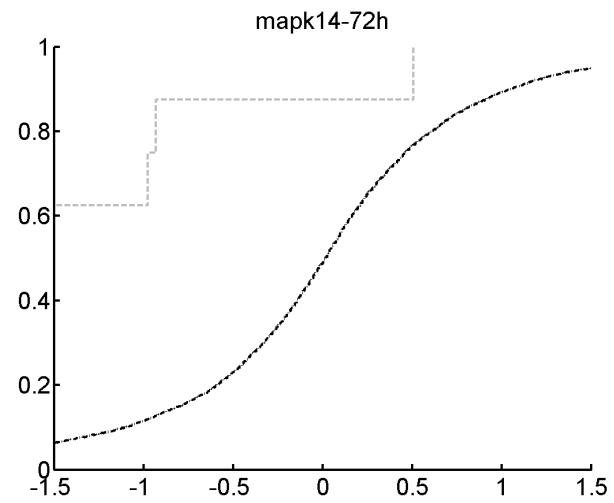
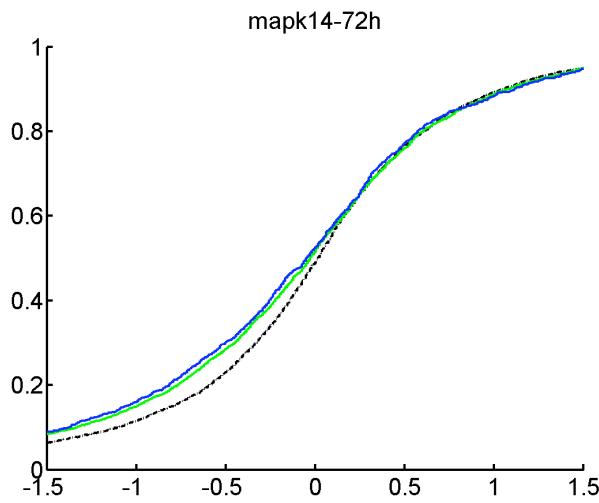
Experiment: mapk14-6h

mi/siRNA: MAPK14



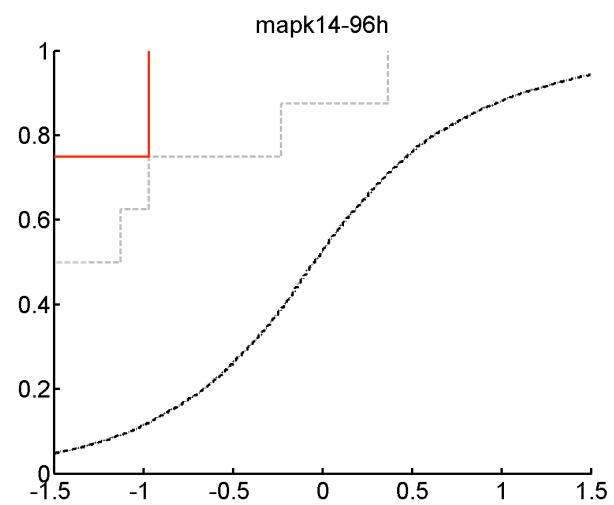
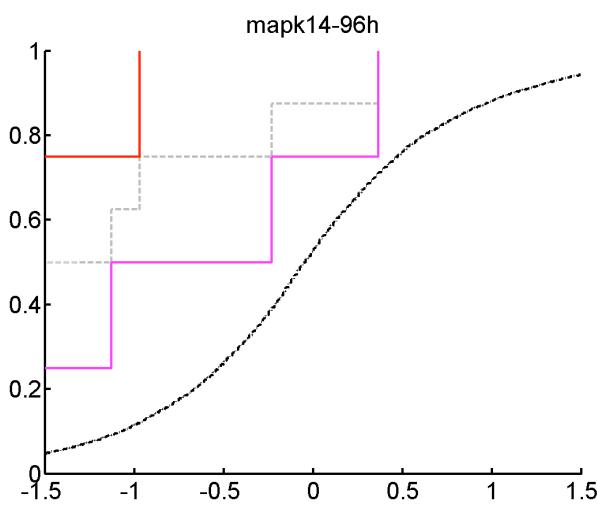
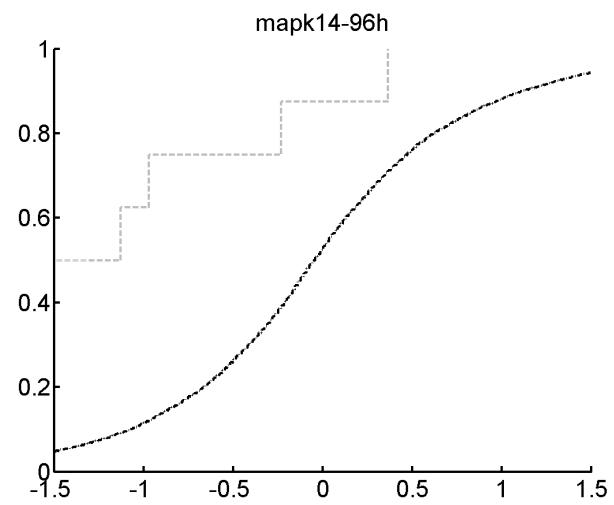
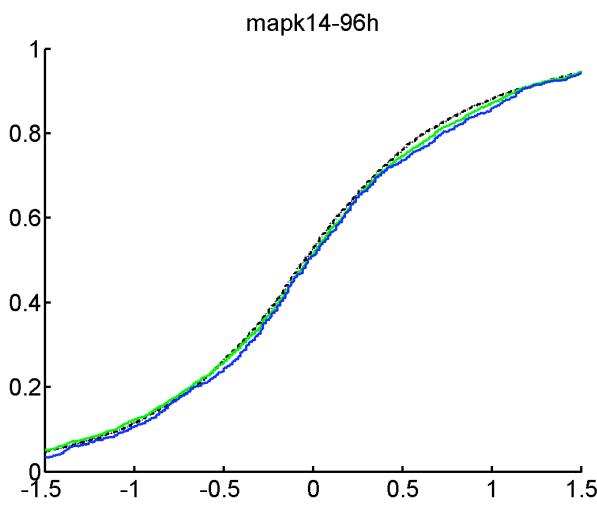
Experiment: mapk14-72h

mi/siRNA: MAPK14



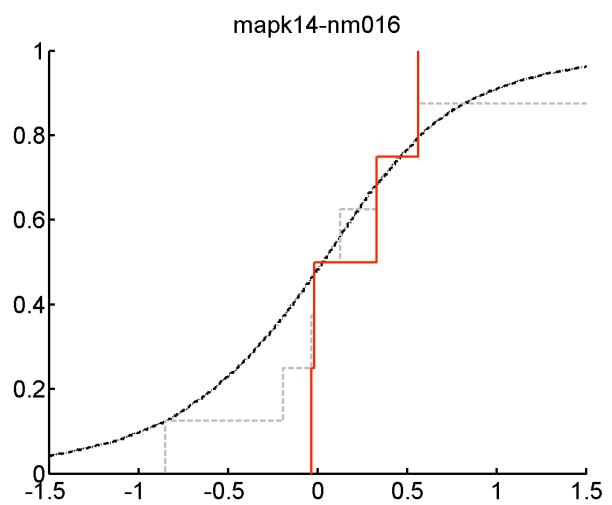
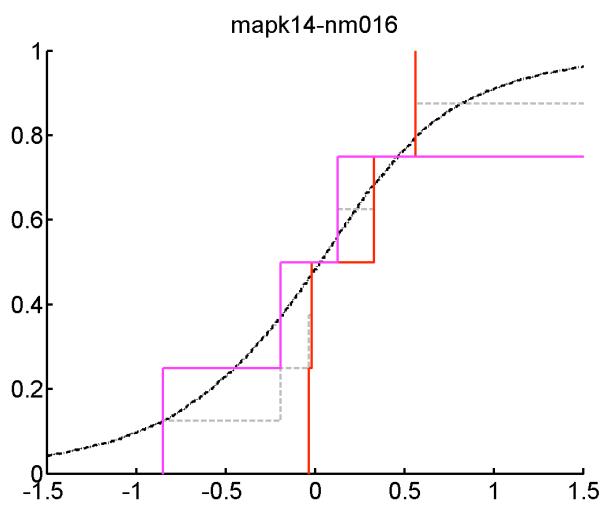
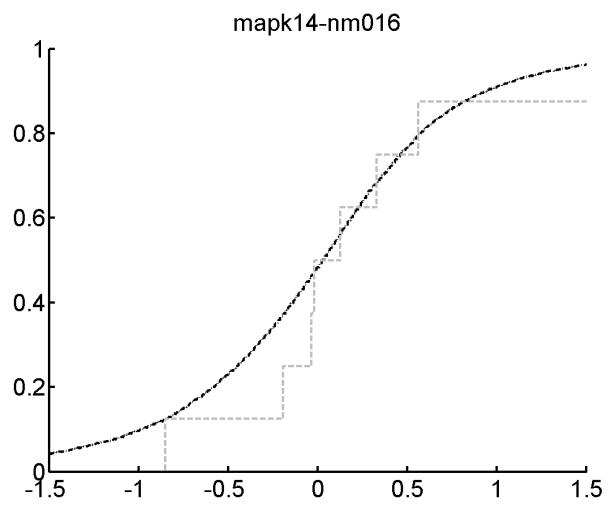
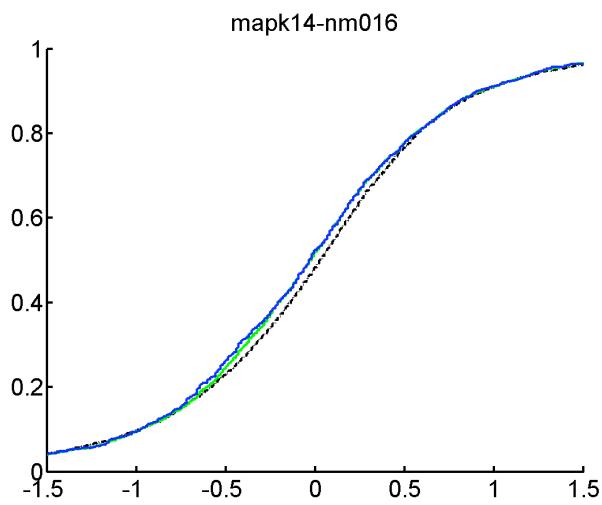
Experiment: mapk14-96h

mi/siRNA: MAPK14



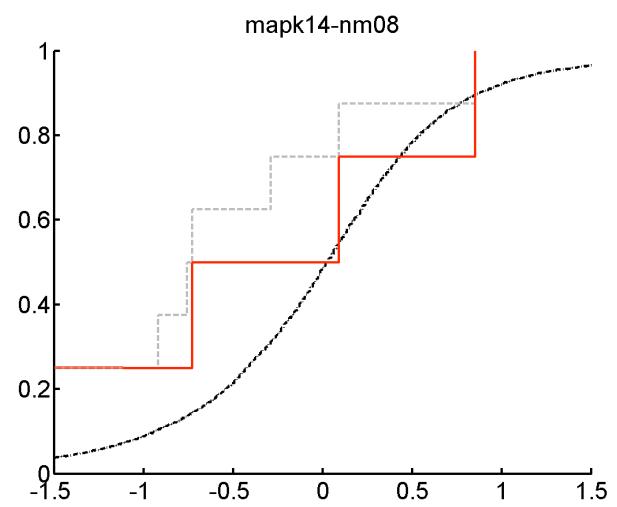
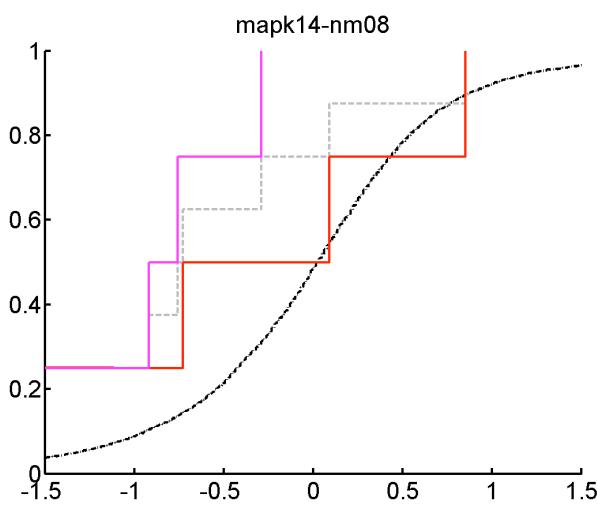
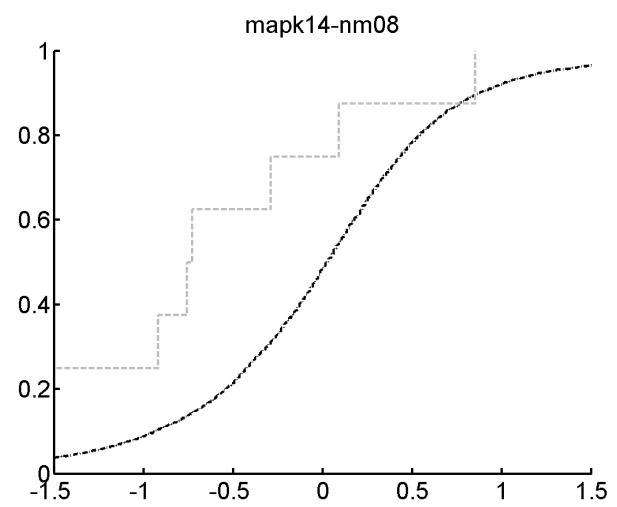
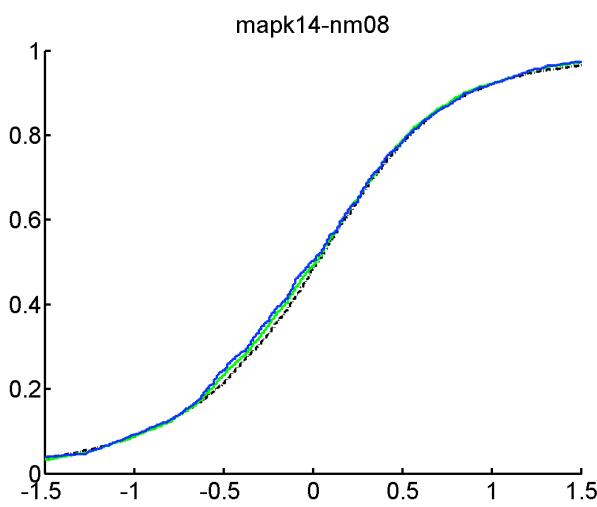
Experiment: mapk14-nm016

mi/siRNA: MAPK14-



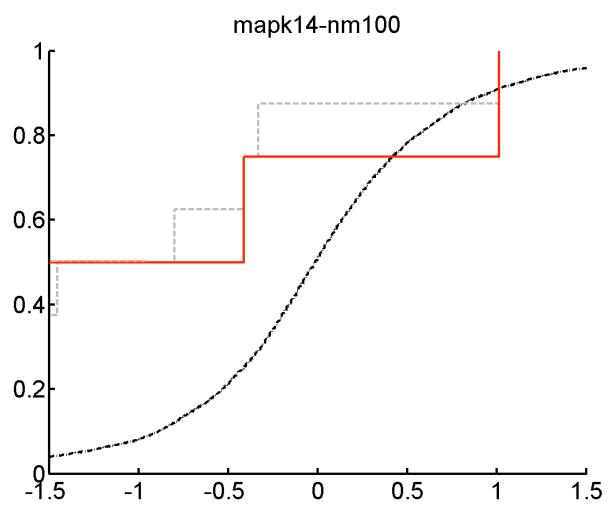
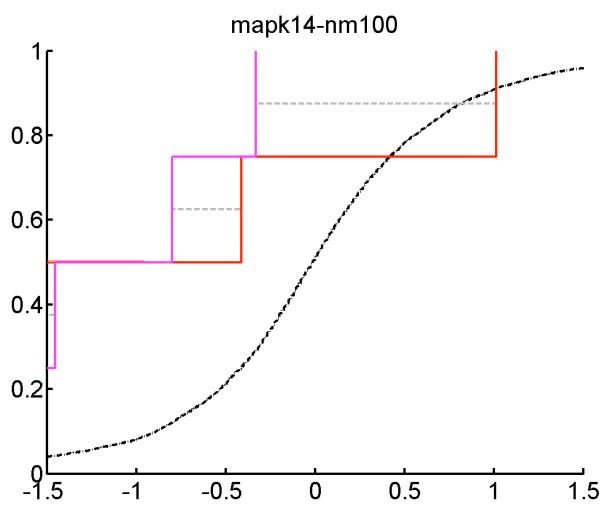
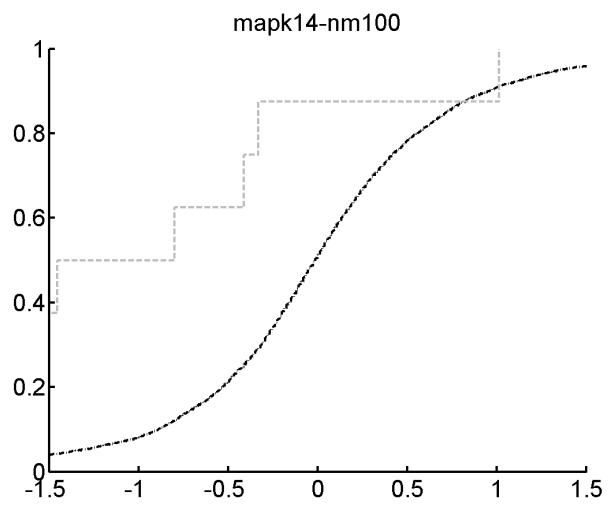
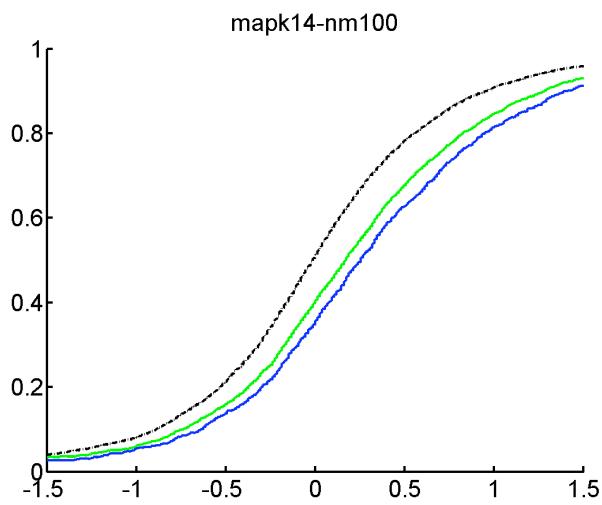
Experiment: mapk14-nm08

mi/siRNA: MAPK14-

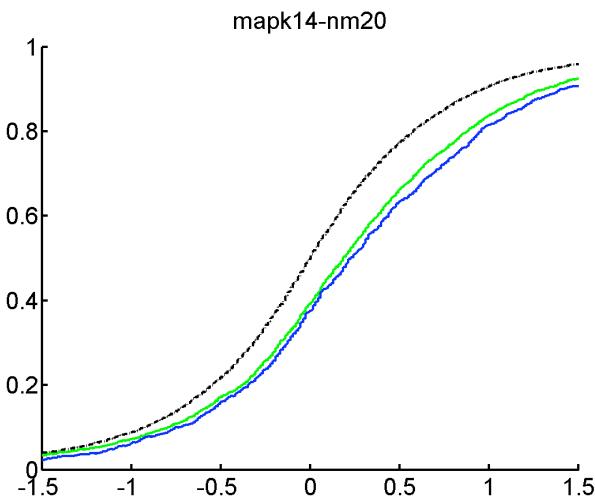


Experiment: mapk14-nm100

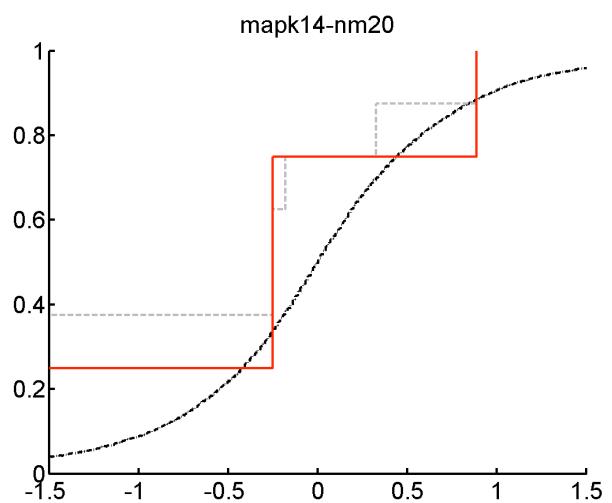
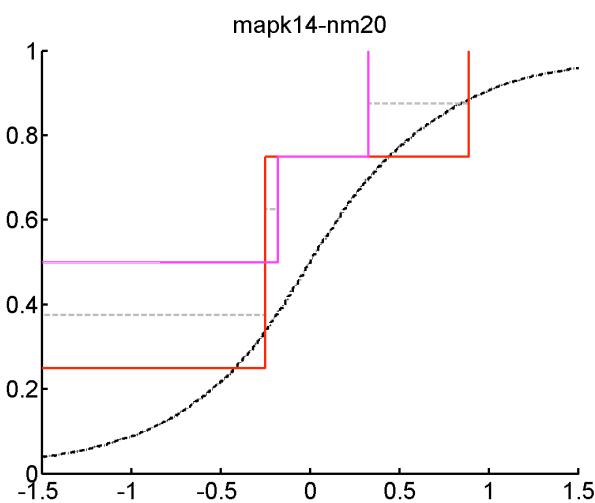
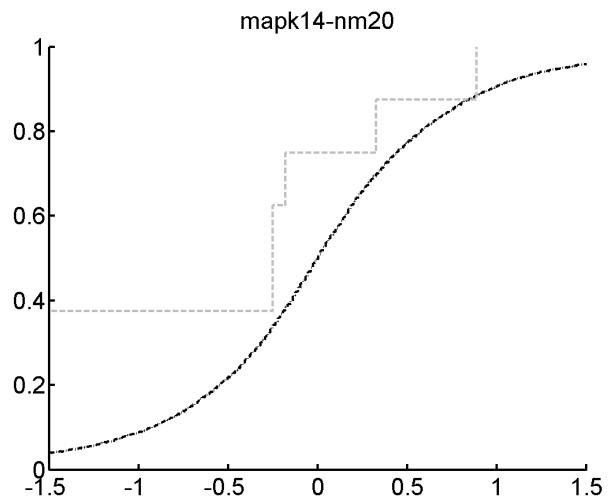
mi/siRNA: MAPK14-100nm



Experiment: mapk14-nm20

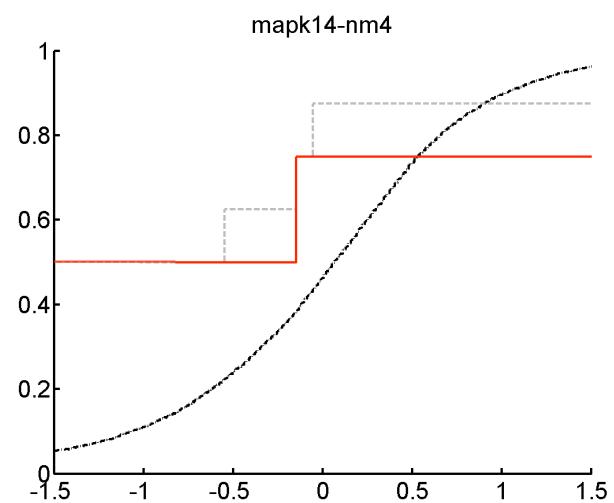
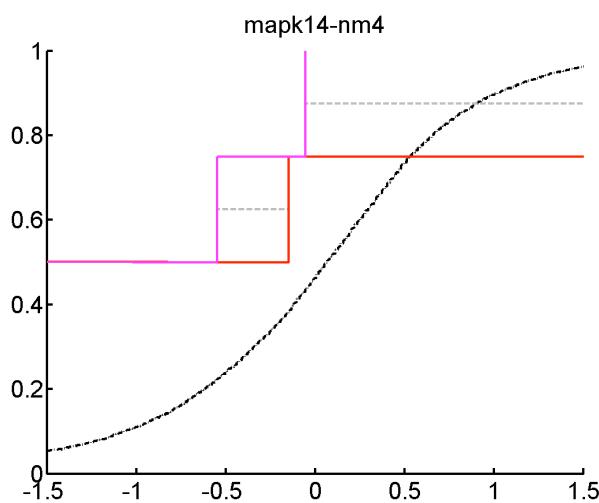
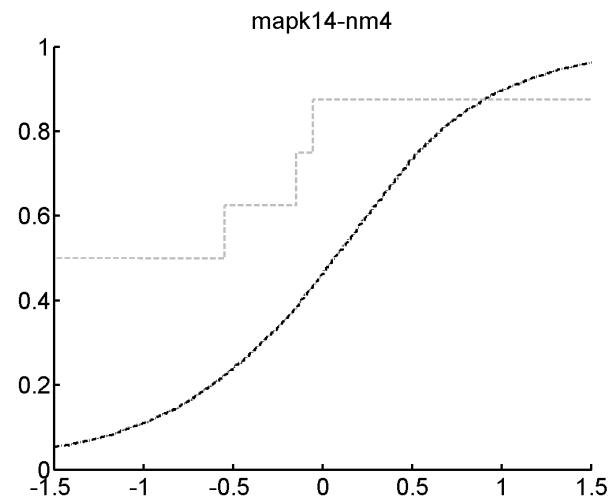
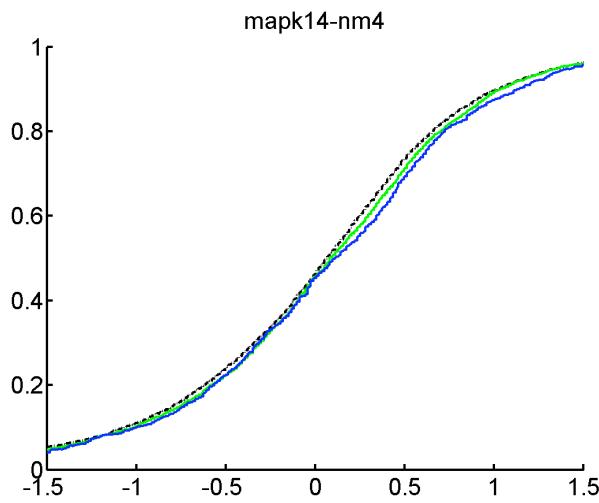


mi/siRNA: MAPK14-20nm



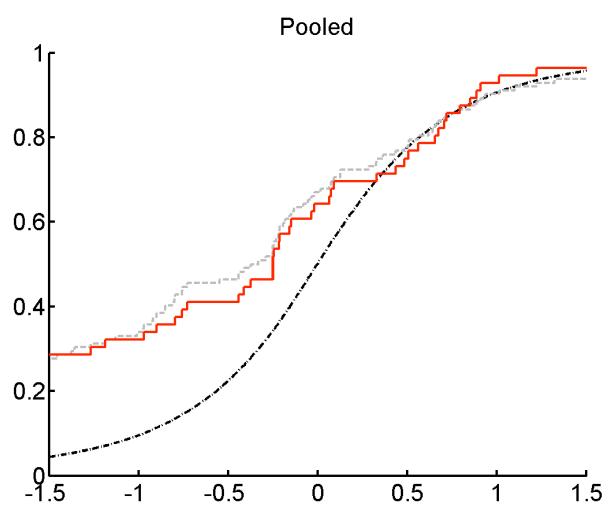
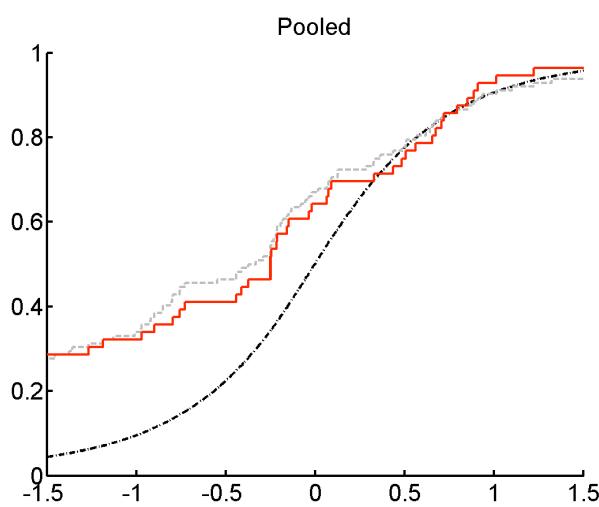
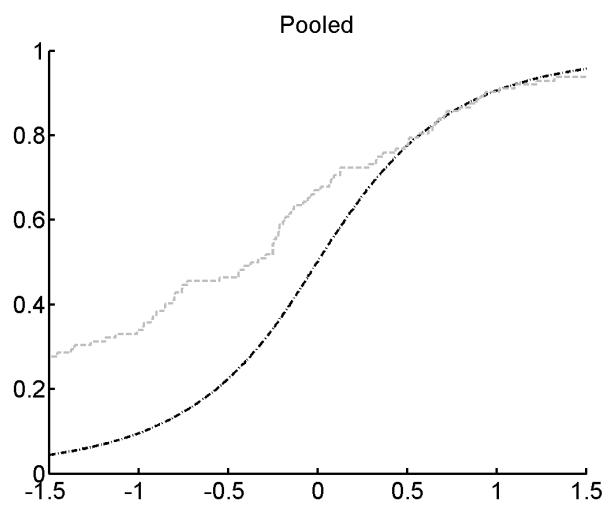
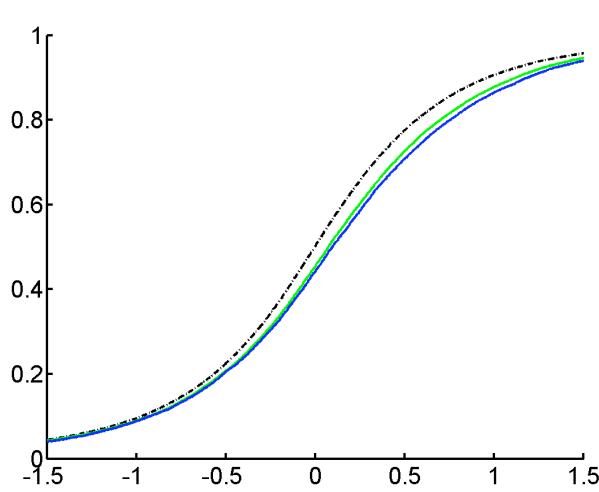
Experiment: mapk14-nm4

mi/siRNA: MAPK14-4nm



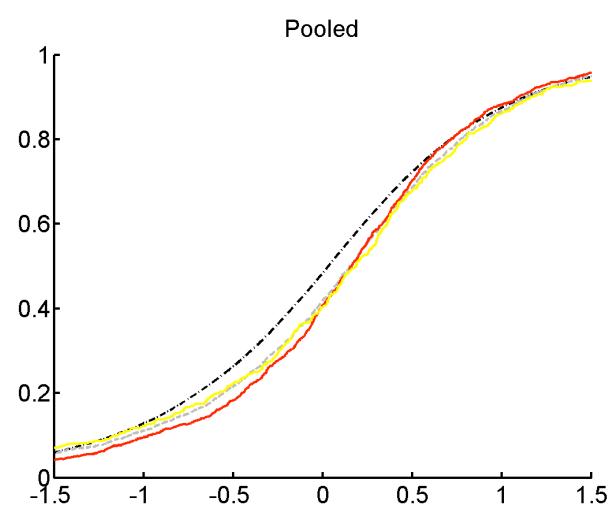
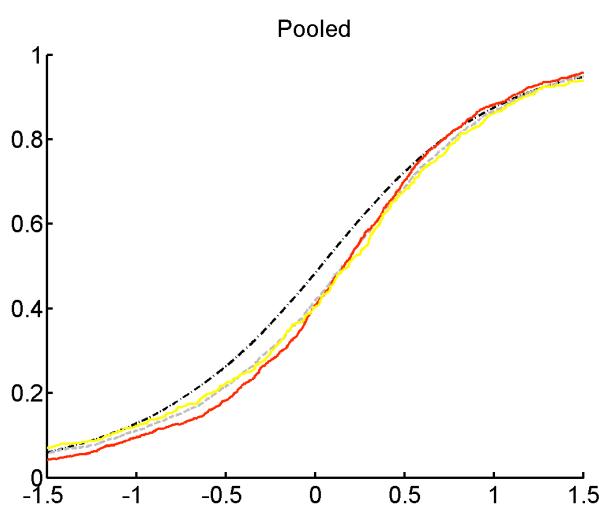
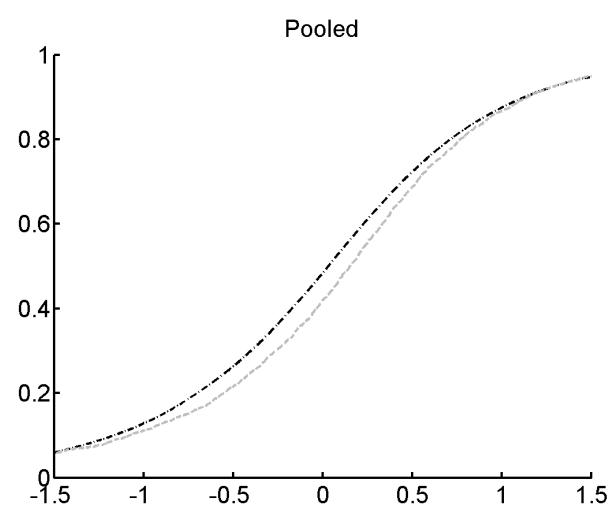
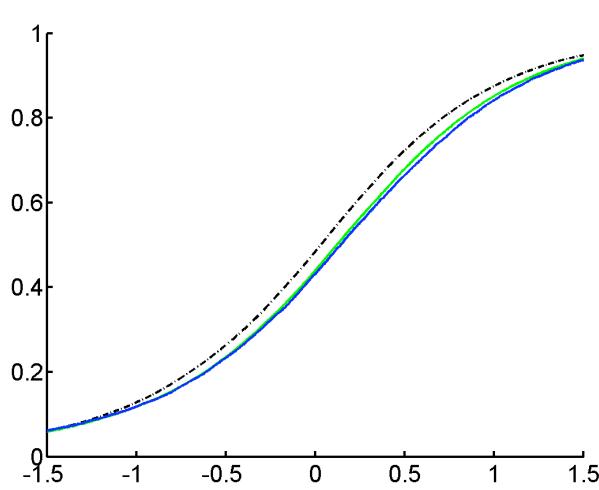
Experiment: mapk14

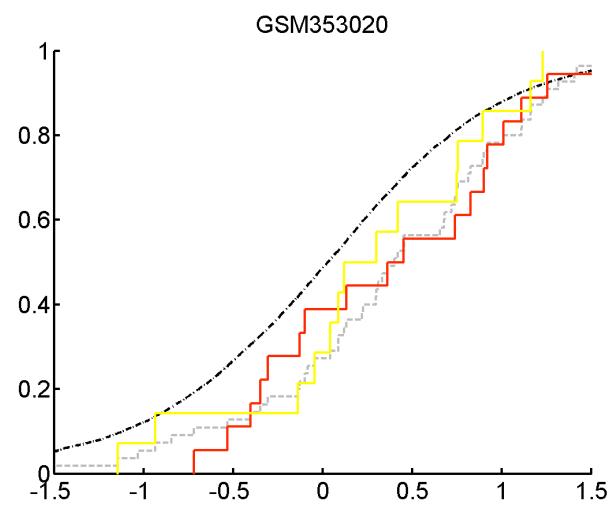
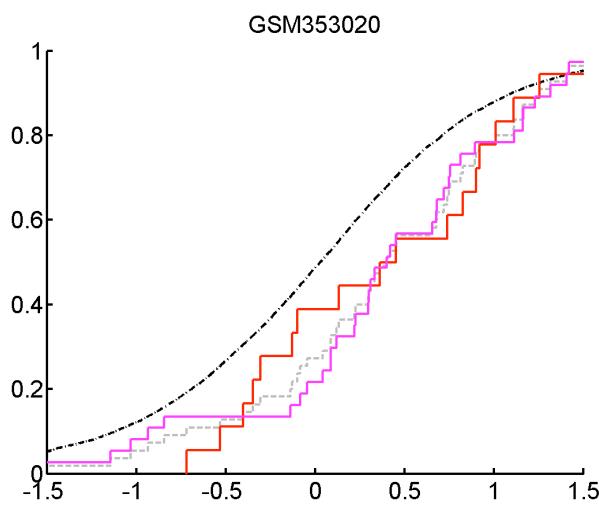
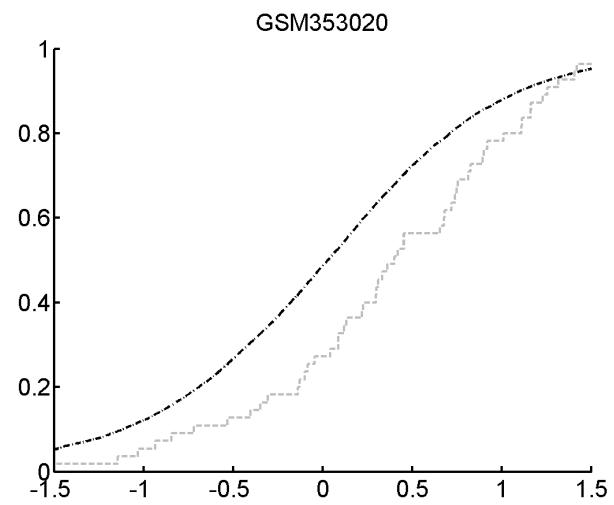
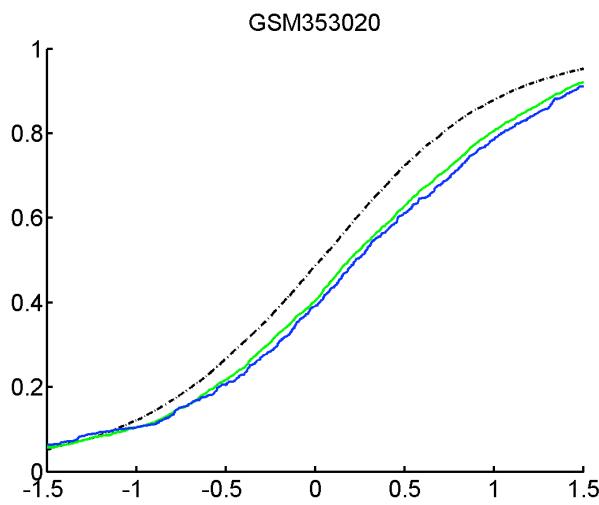
mi/siRNA: pooled



Experiment: apob

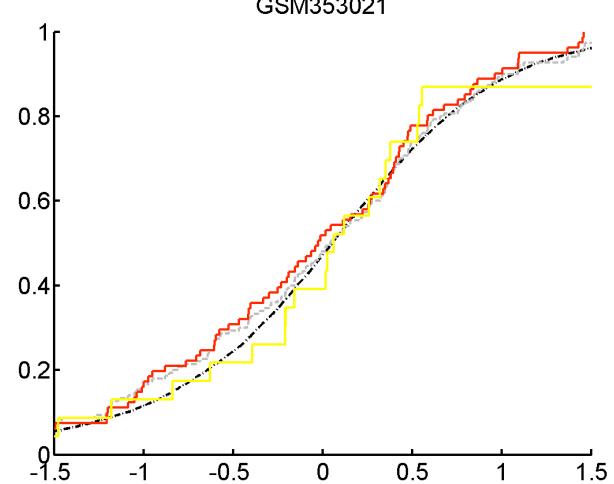
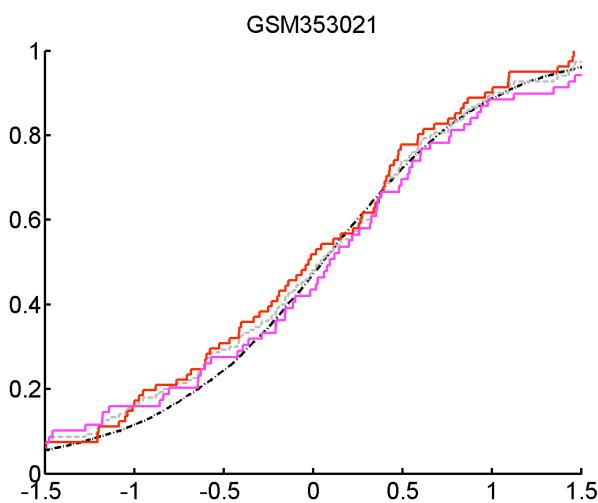
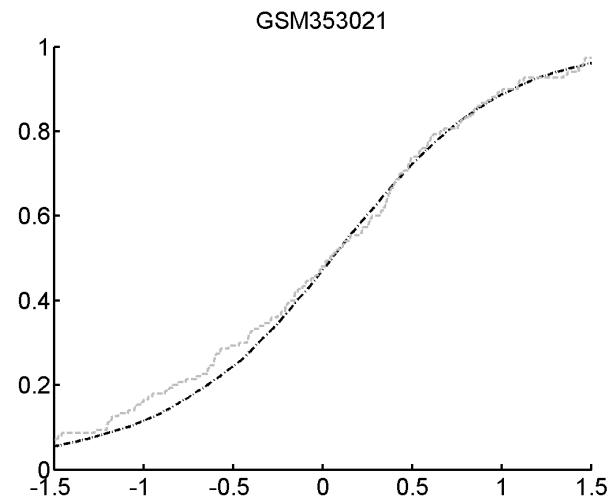
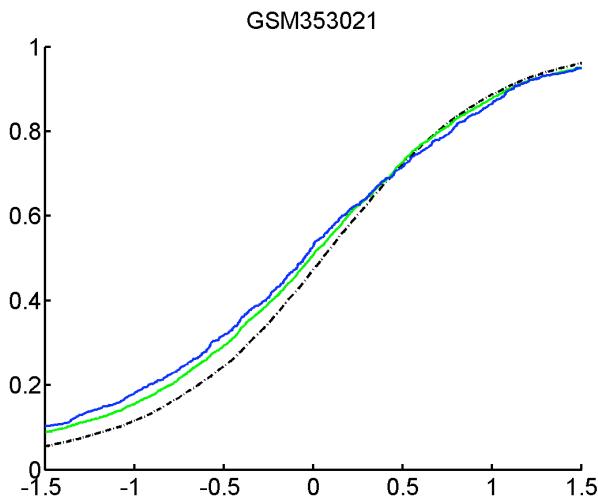
mi/siRNA: pooled





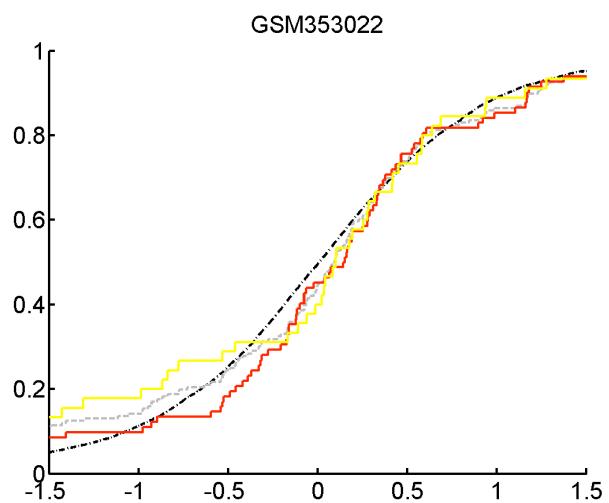
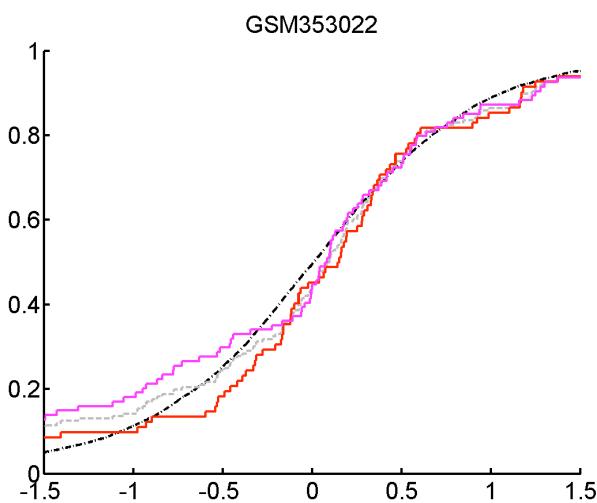
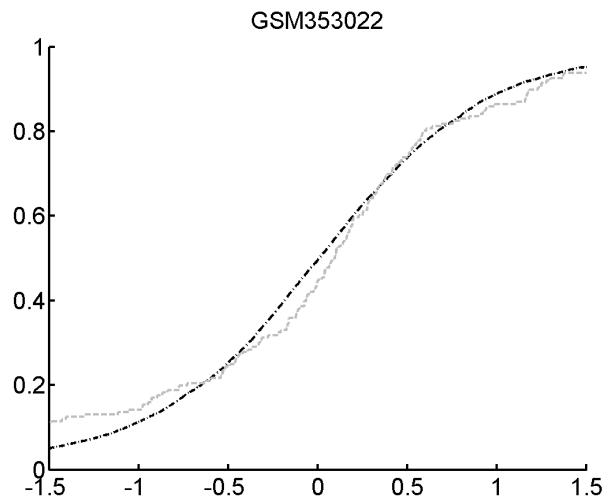
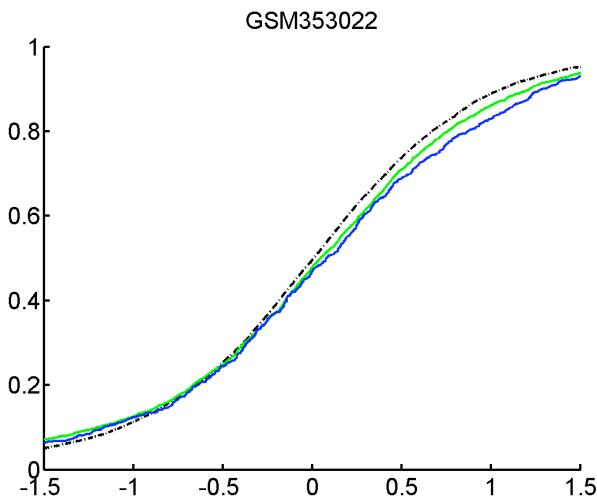
Experiment: GSM353021

mi/siRNA: APOB-Hs2-48h



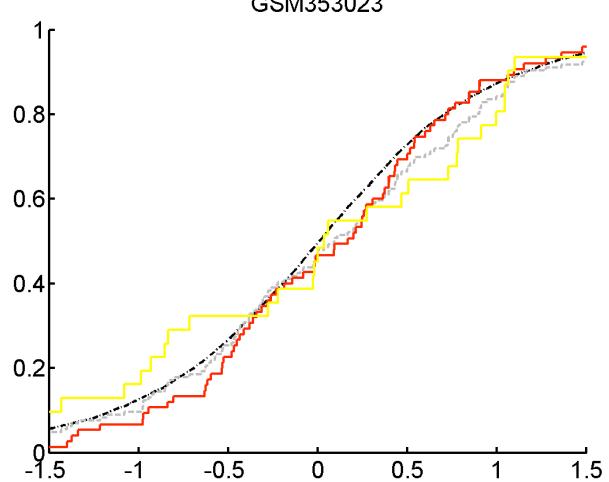
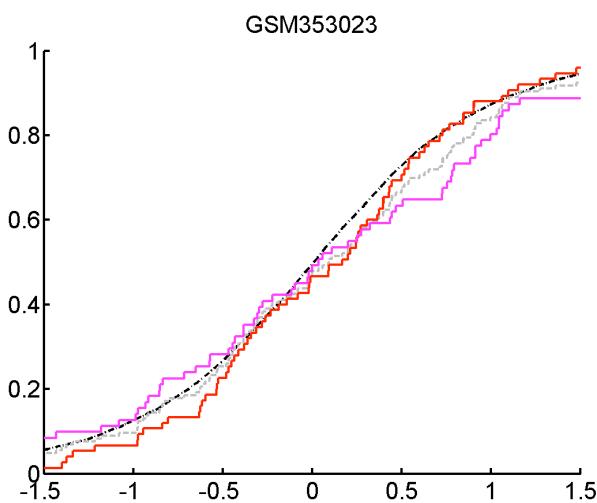
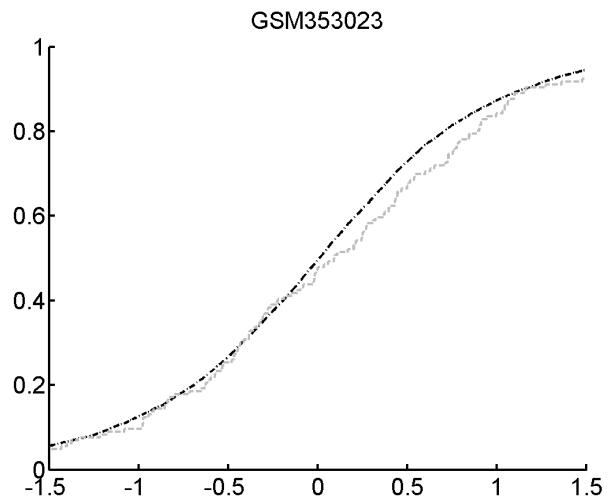
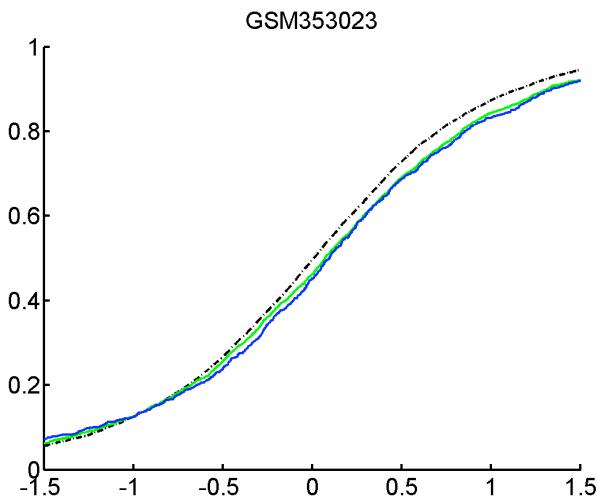
Experiment: GSM353022

mi/siRNA: APOB-Hs3-48h



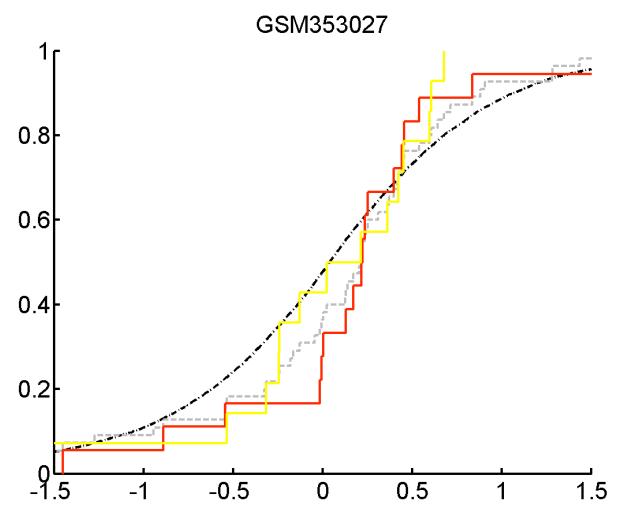
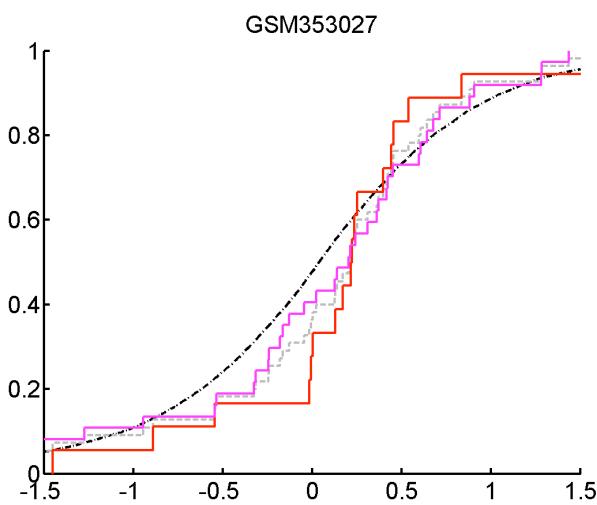
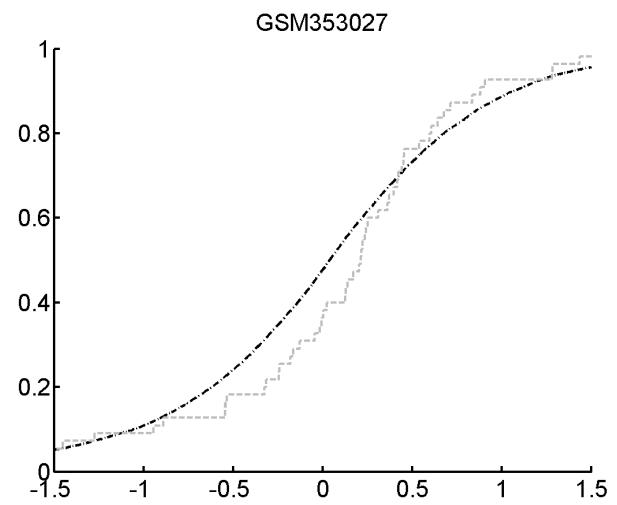
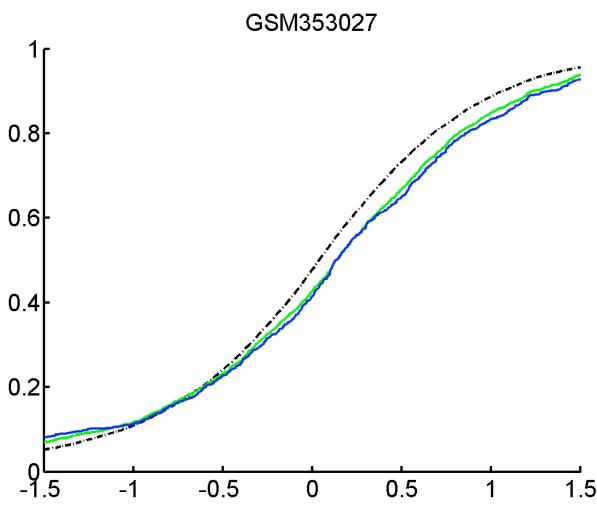
Experiment: GSM353023

mi/siRNA: APOB-Hs4-48h



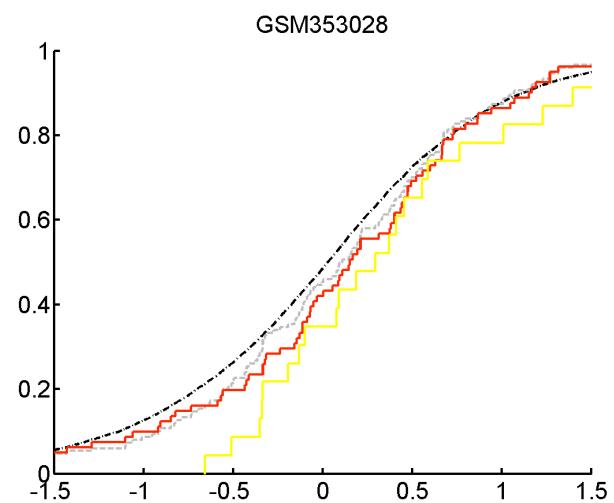
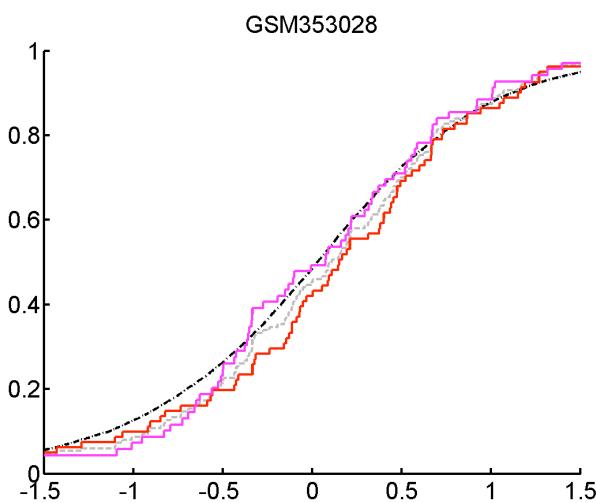
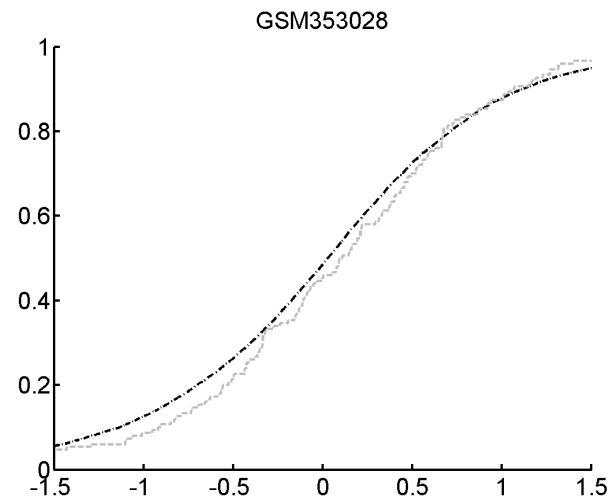
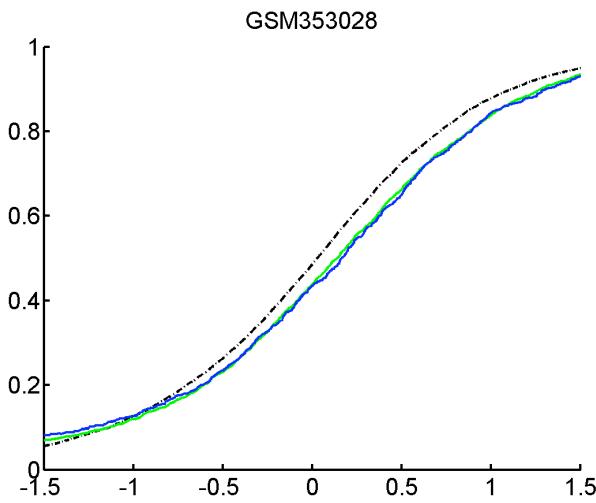
Experiment: GSM353027

mi/siRNA: APOB-Hs1-24h

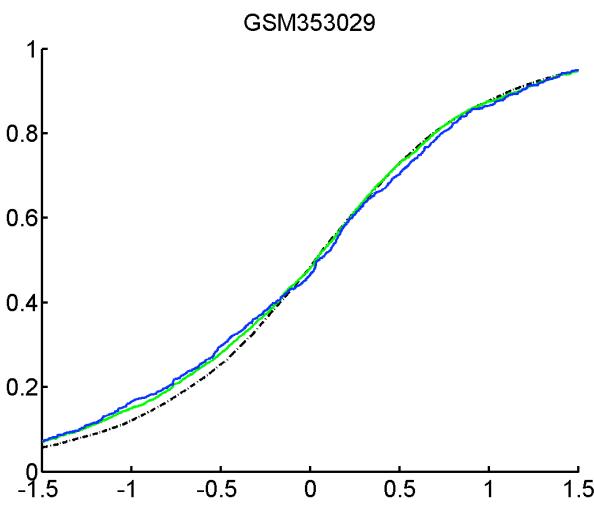


Experiment: GSM353028

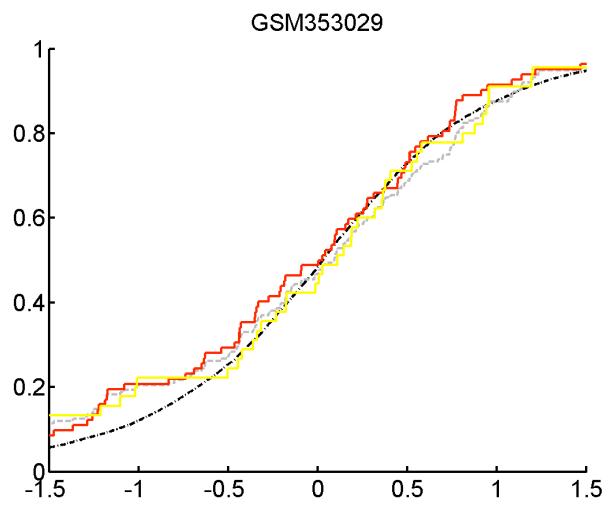
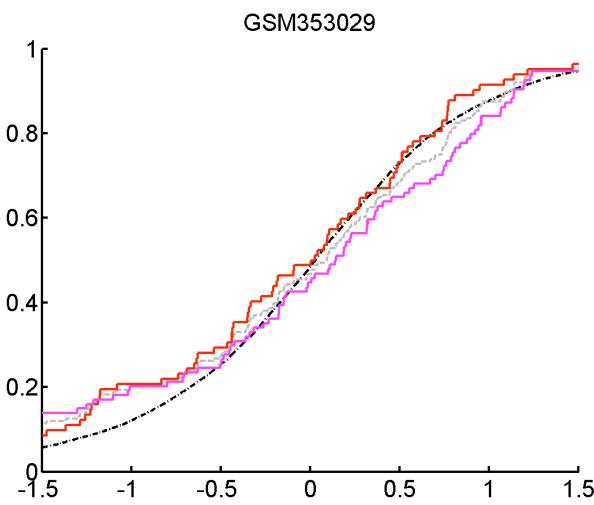
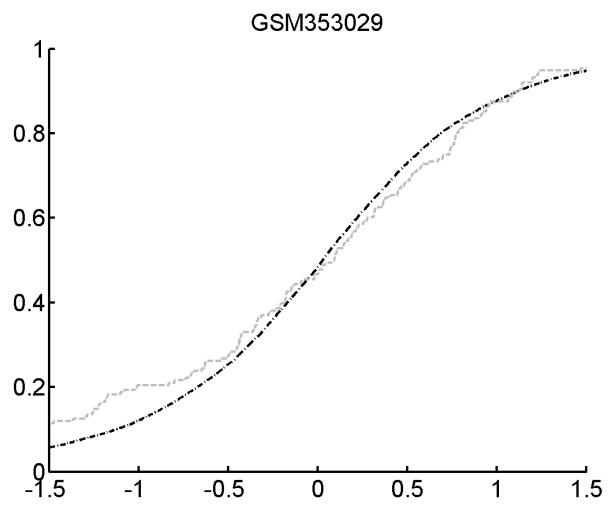
mi/siRNA: APOB-Hs2-24h



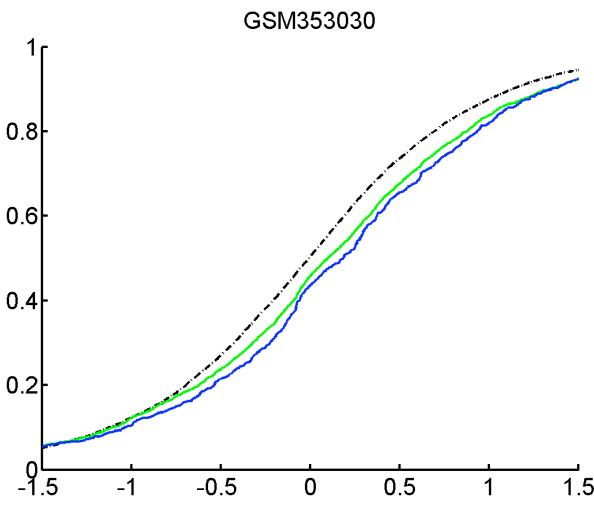
Experiment: GSM353029



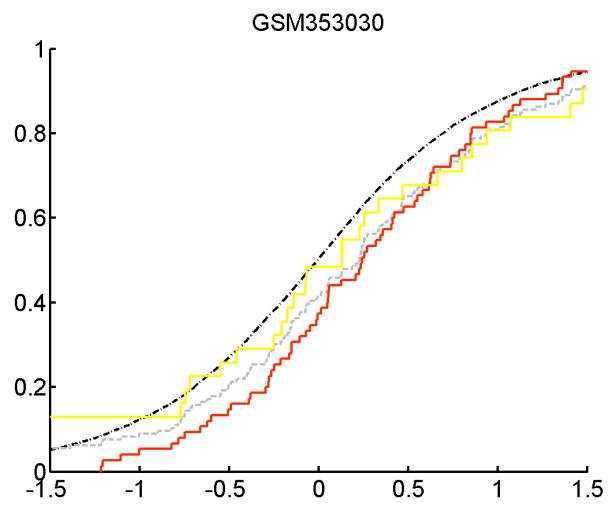
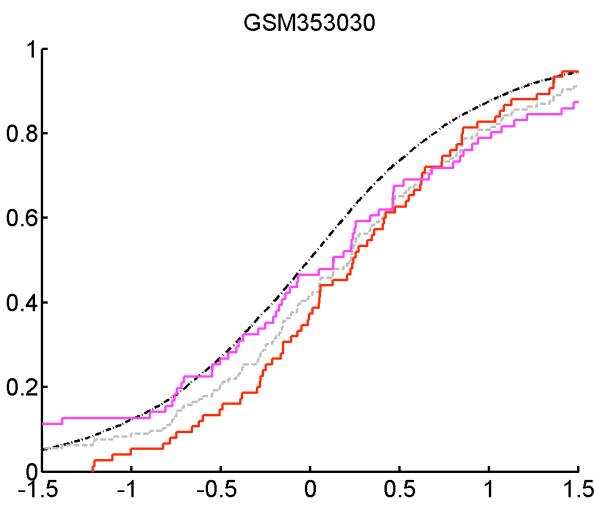
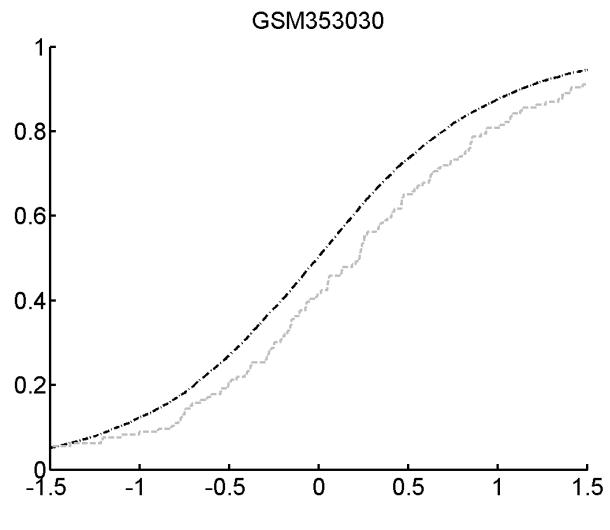
mi/siRNA: APOB-Hs3-24h



Experiment: GSM353030

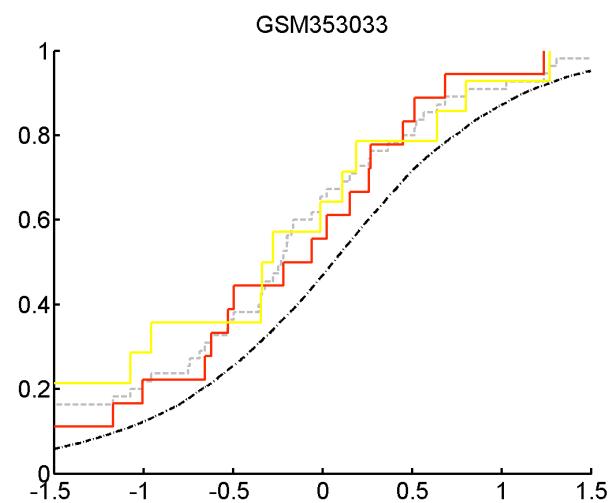
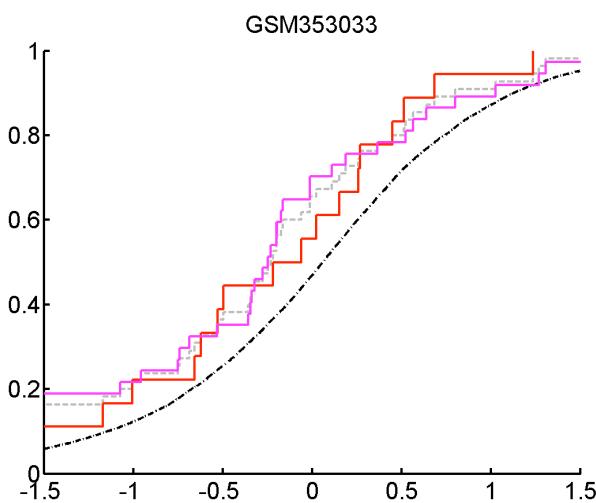
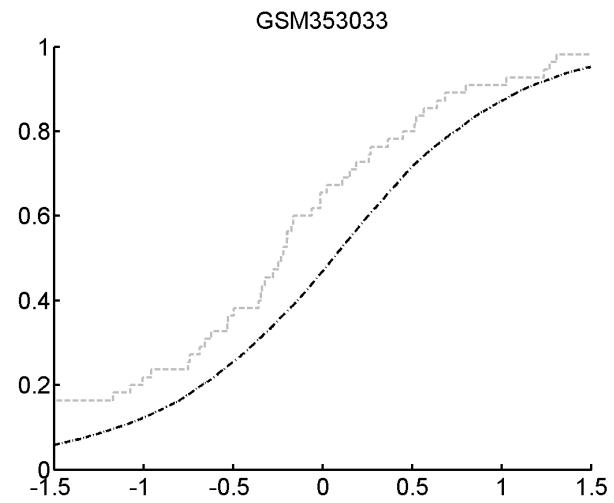
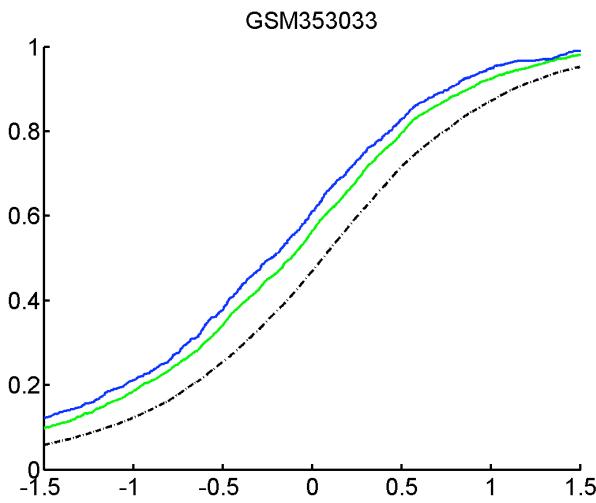


mi/siRNA: APOB-Hs4-24h



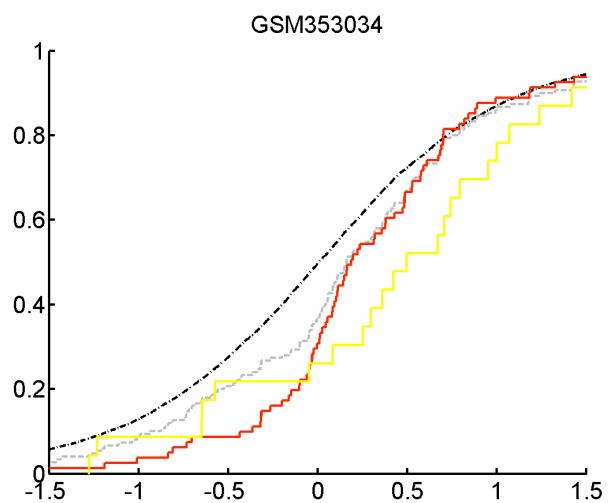
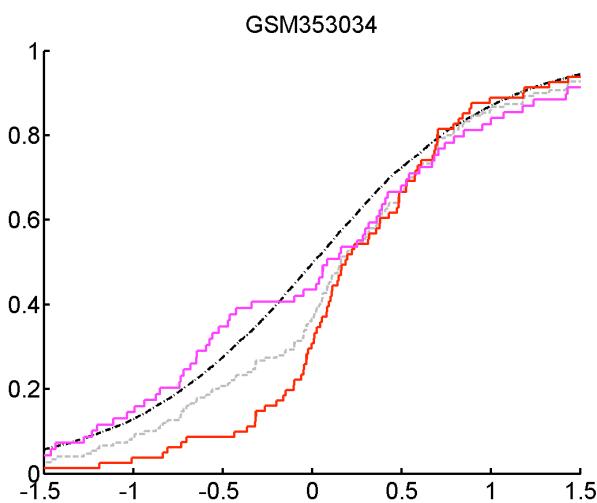
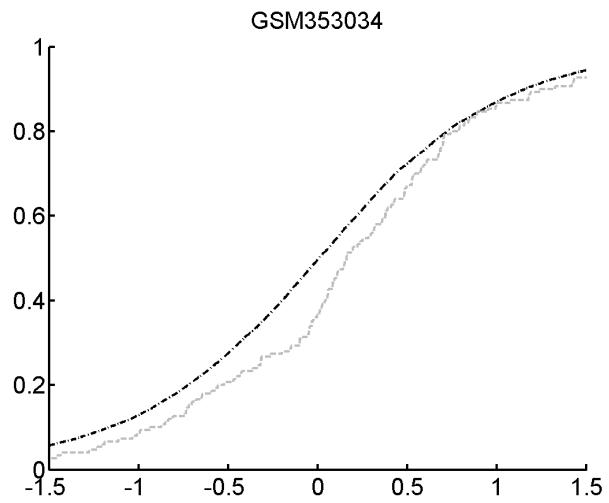
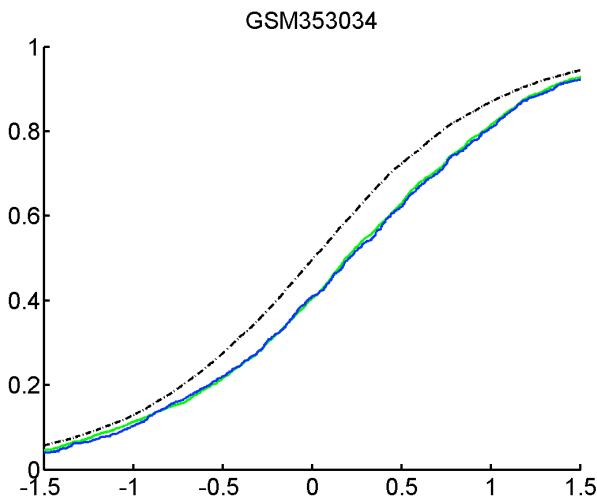
Experiment: GSM353033

mi/siRNA: APOB-Hs1-12h

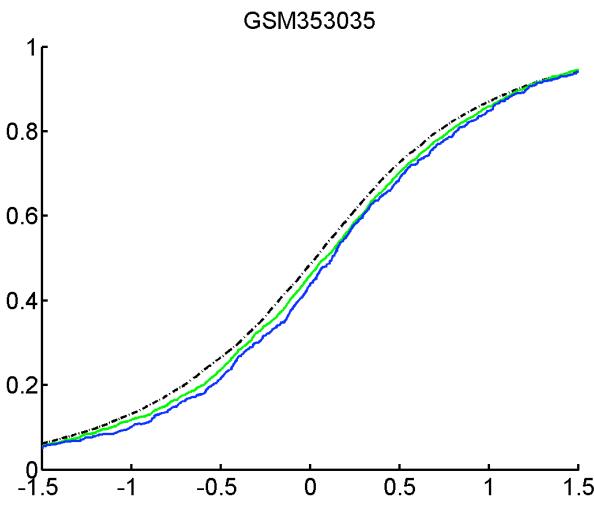


Experiment: GSM353034

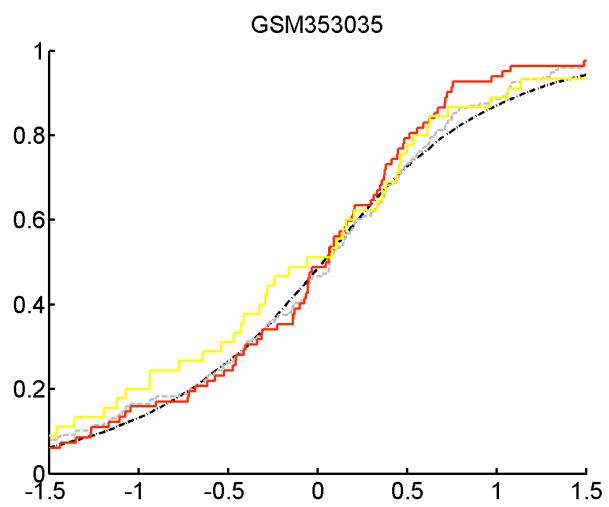
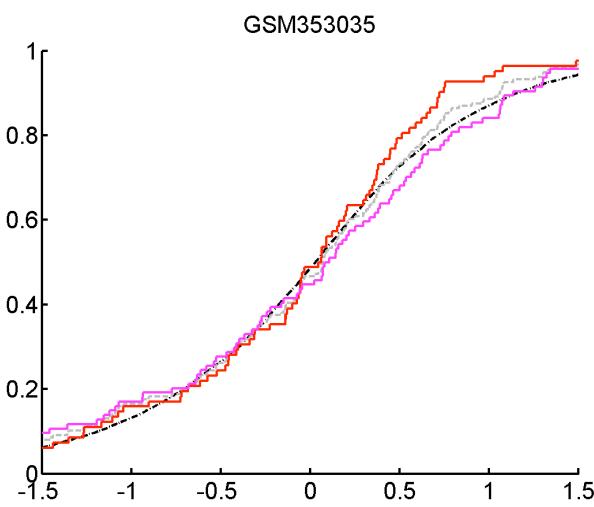
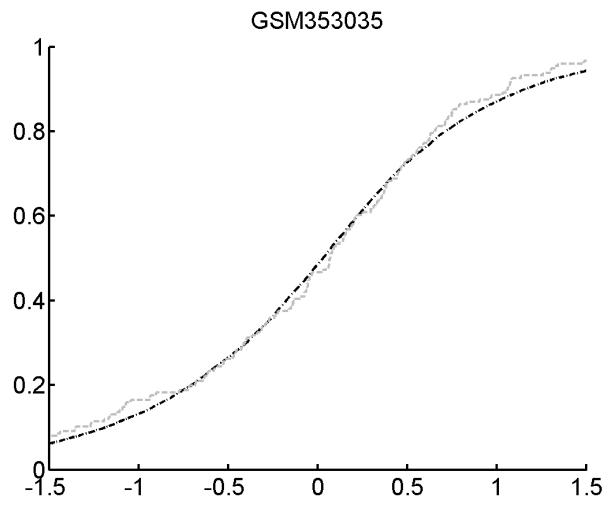
mi/siRNA: APOB-Hs2-12h



Experiment: GSM353035

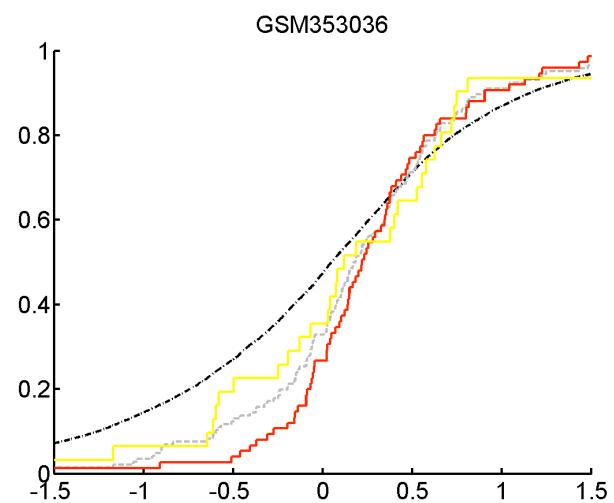
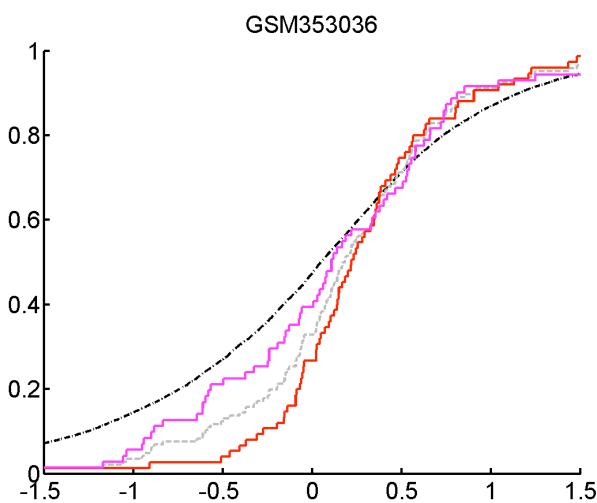
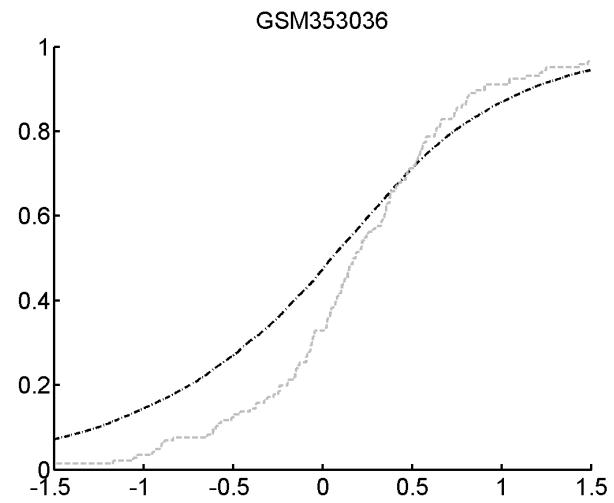
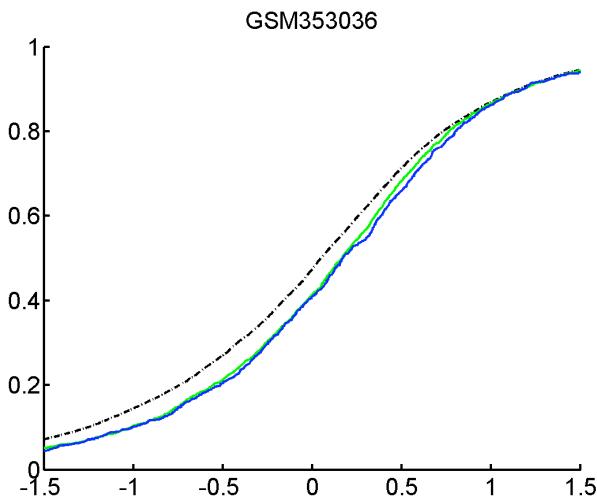


mi/siRNA: APOB-Hs3-12h



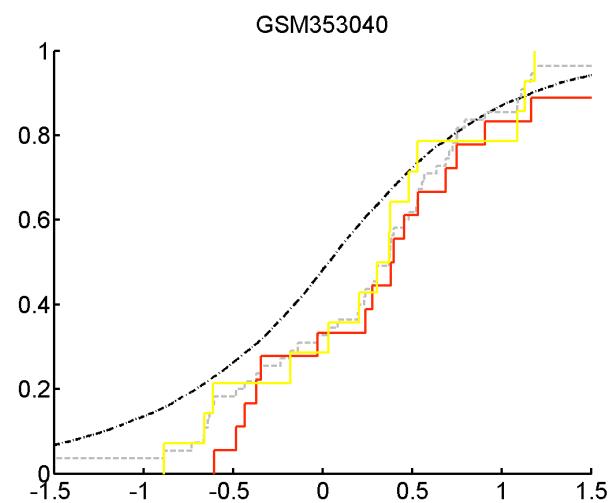
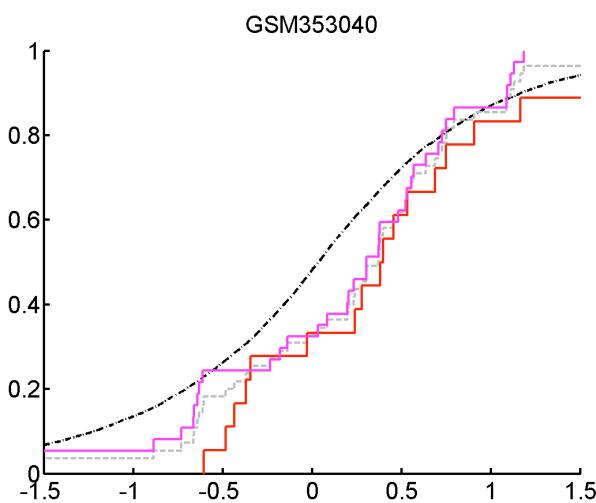
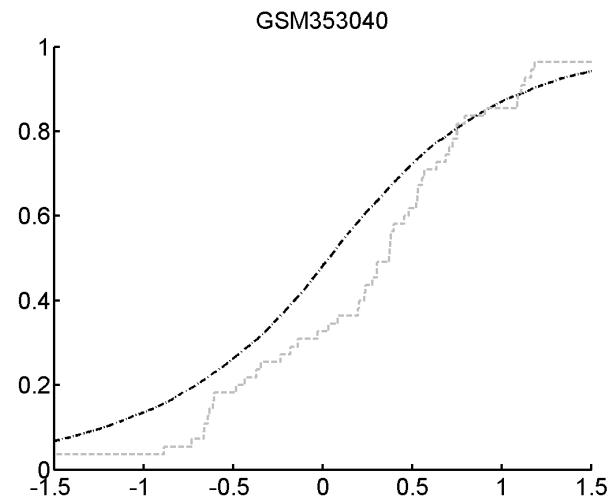
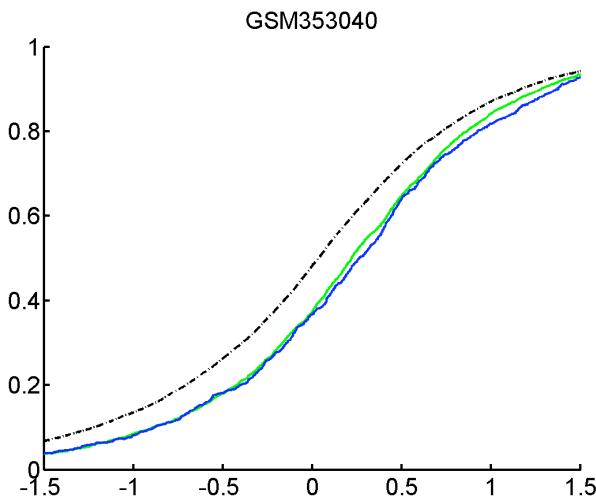
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mi/siRNA: APOB-Hs4-12h



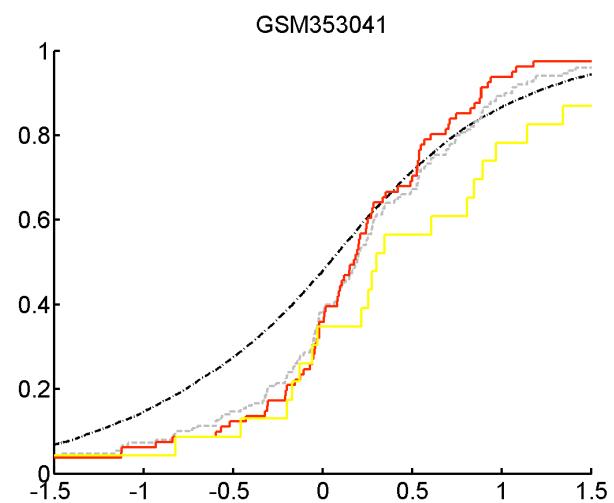
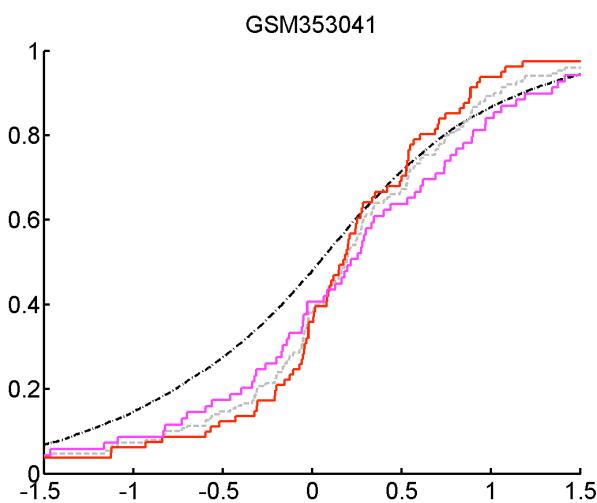
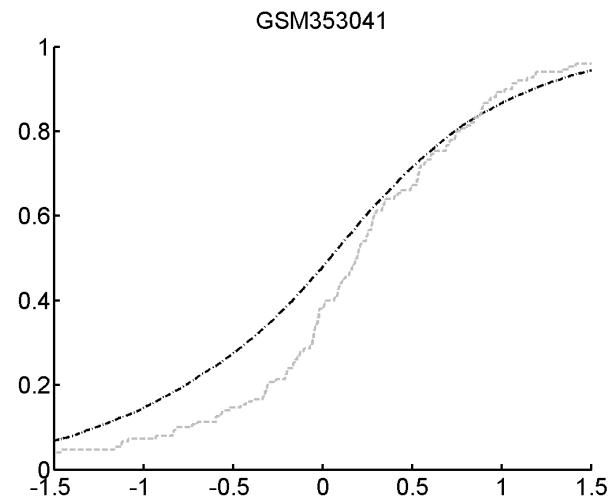
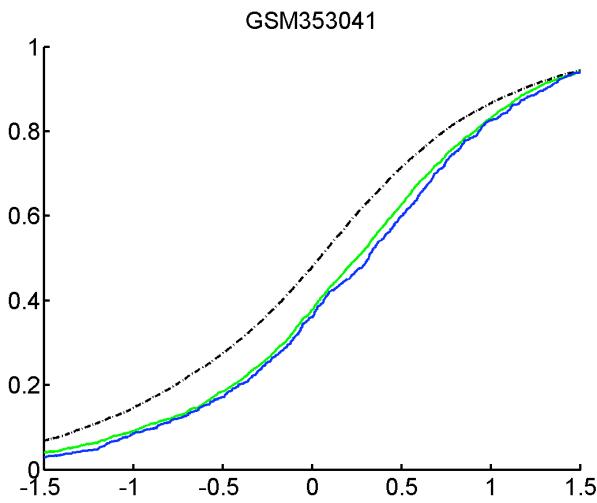
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mi/siRNA: APOB-Hs1-6h



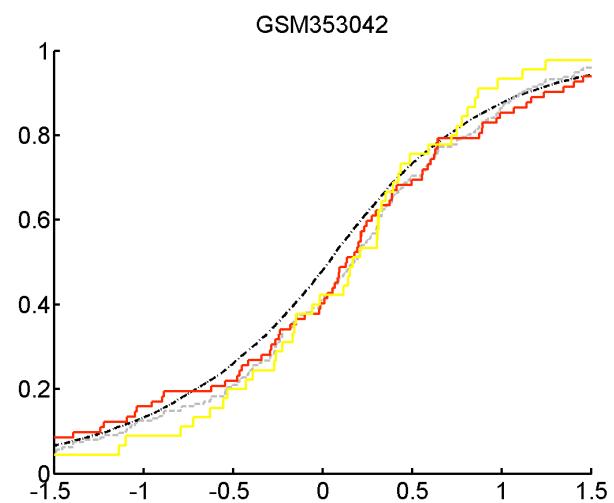
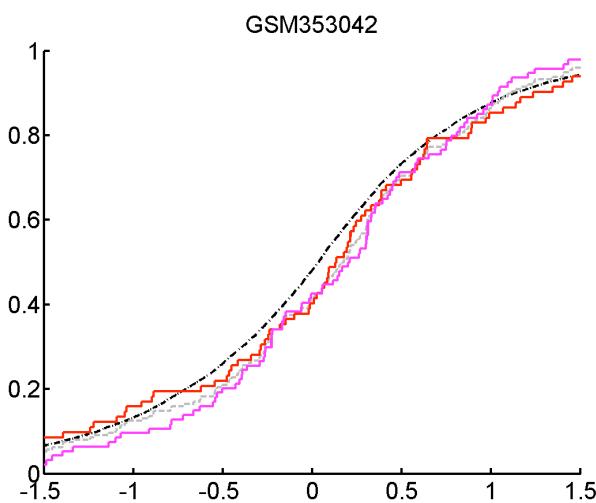
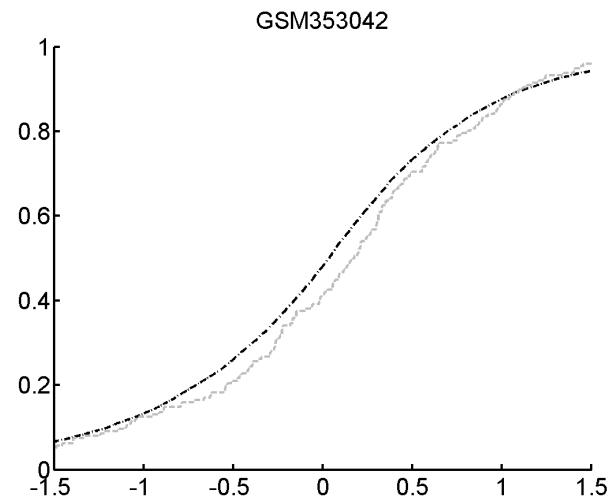
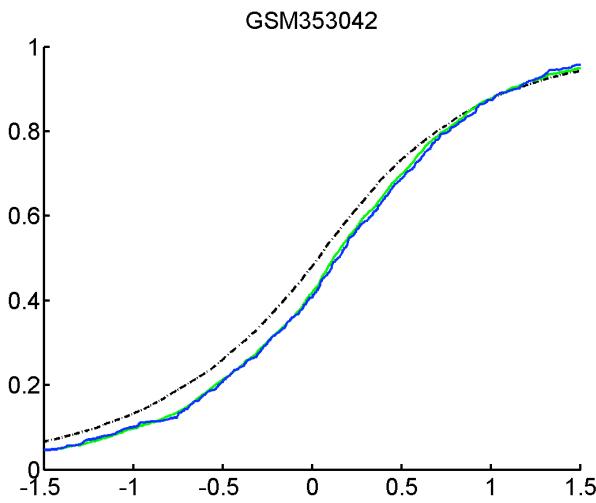
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mi/siRNA: APOB-Hs2-6h



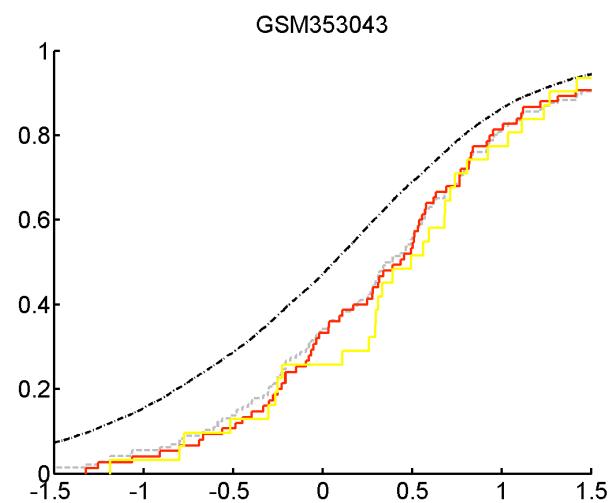
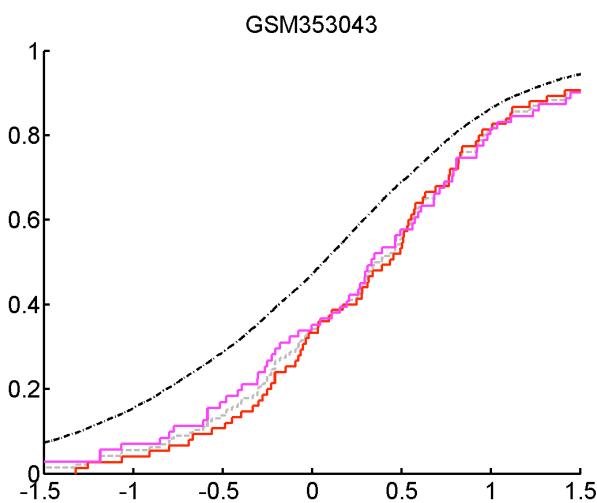
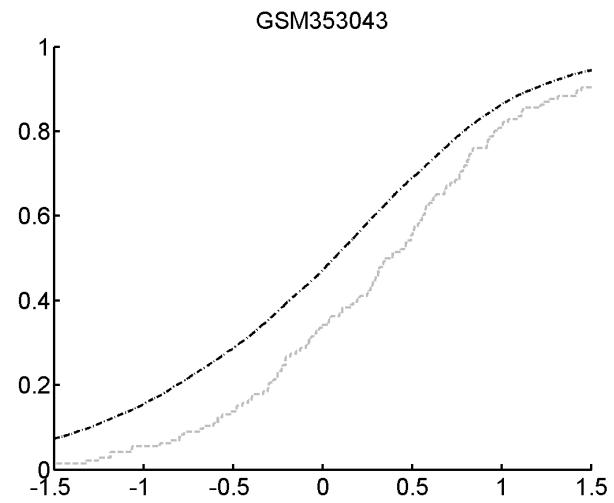
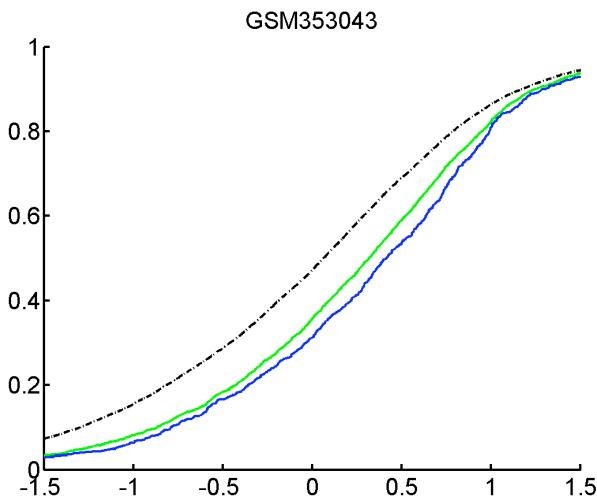
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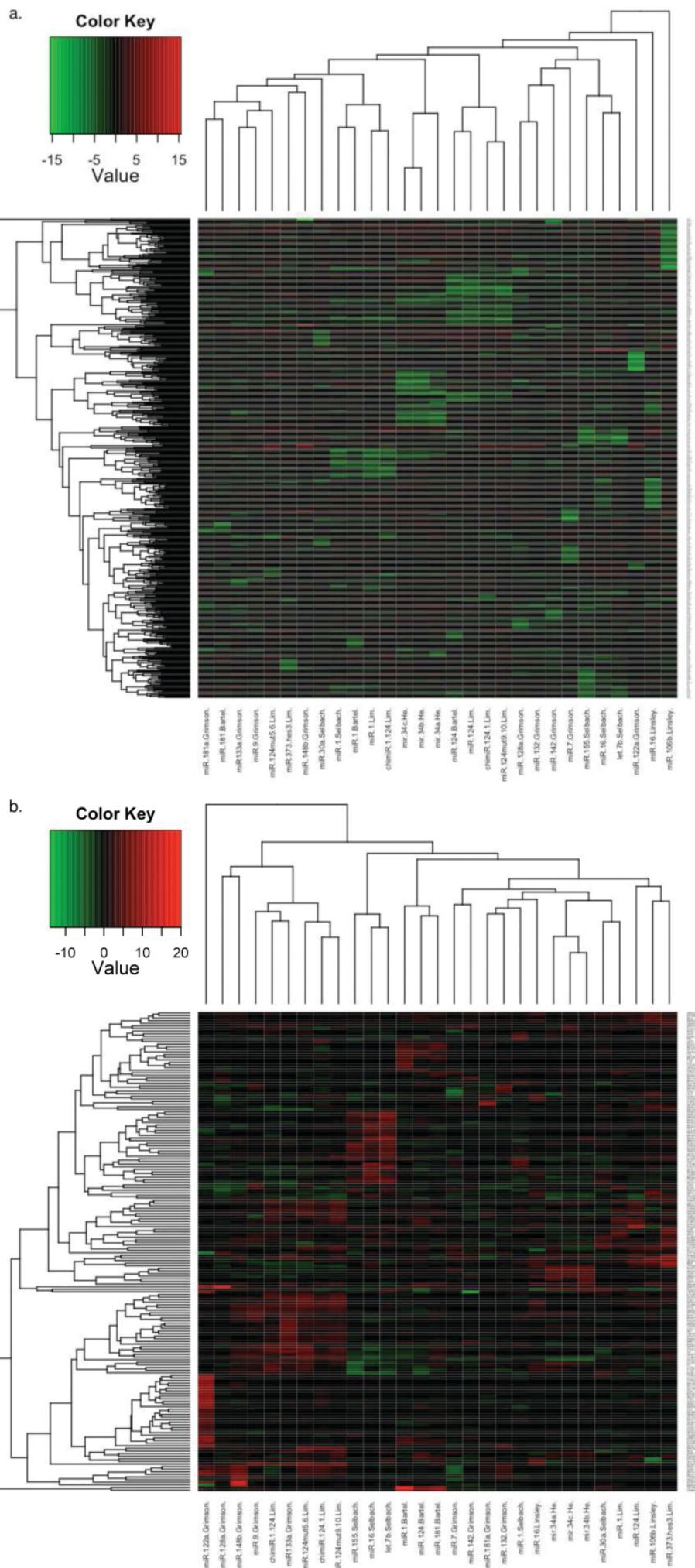
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Experiment: GSM353043

mi/siRNA: APOB-Hs4-6h





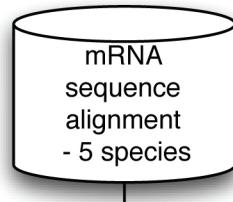
Supplementary Figure 1. Changes in mRNA expression across 70 microRNA transfection experiments in HeLa cells. Data from GEO database, GSM numbers in Supplementary Table 2 and references in Table 1 (main paper).

a. genes which go down by 4 standard deviations or more in at least one experiment

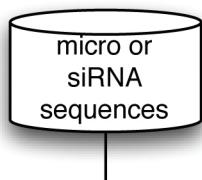
b. genes which go up by at 4 standard deviations or more in at least one experiment.

Supplementary Figure 2. Analysis pipeline

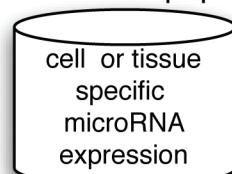
UCSC browser



RFAM



Data from Landgraff et al.,
or individual papers



mi- or siRNA target
prediction
(6-mers, 7-mers,
miRanda)

GEO or Array Express

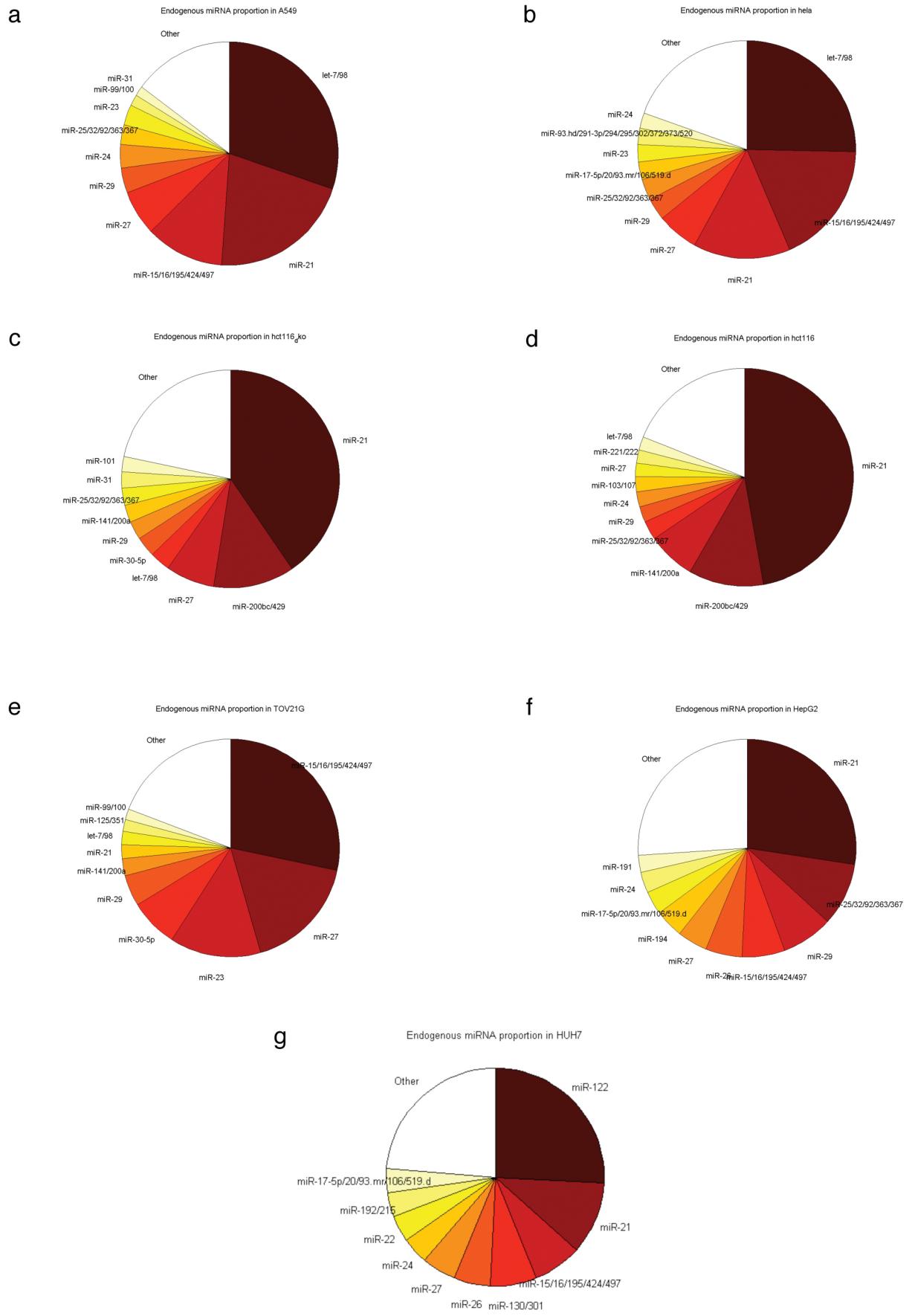
mRNA or protein
expression
changes after si/miRNA
transfections or inhibition

Determine sets X, D & B

K-S statistics

Supplementary Figure 2. Pipeline for analysis. Data sources shown above description.

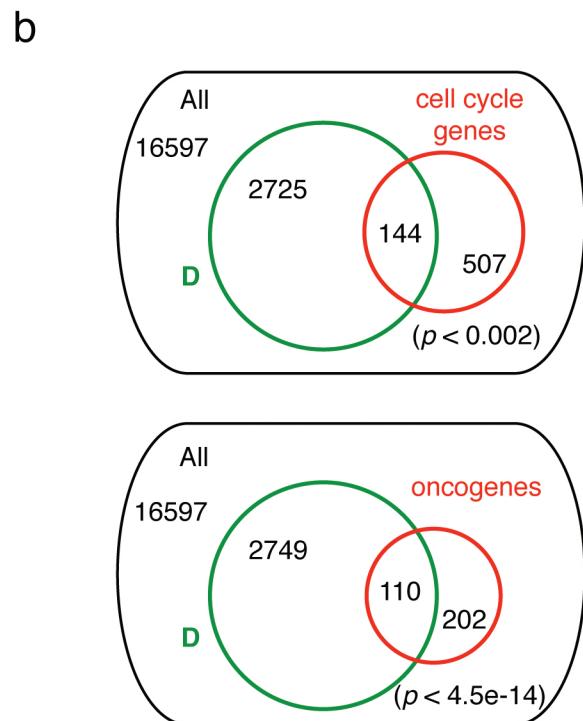
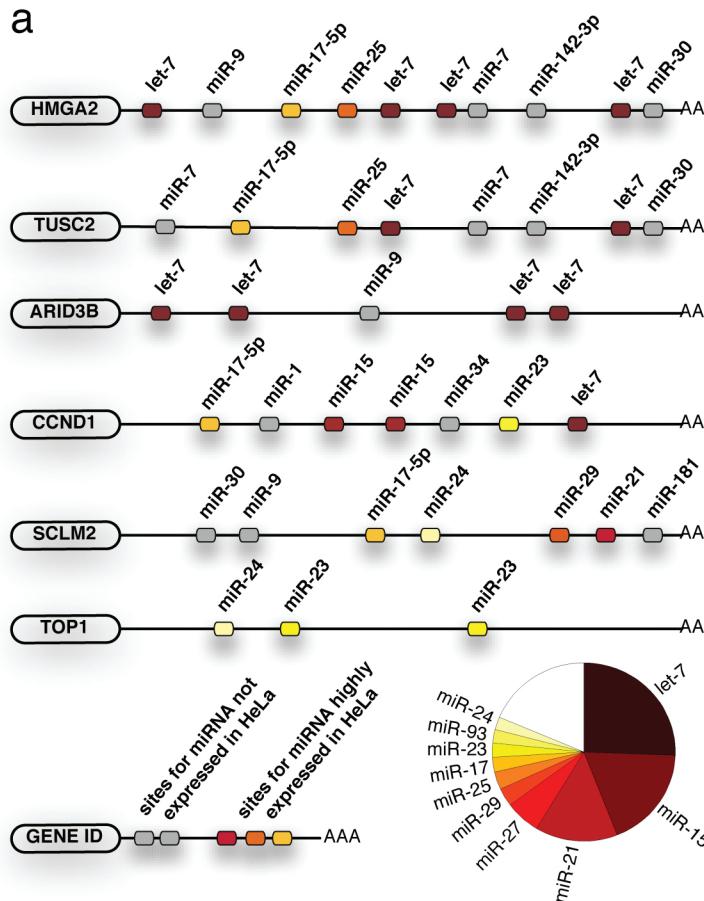
Supplementary Figure 3. microRNA expression in 7 cell types



Supplementary Figure 3. Top 10 expressed families of microRNA genes in each cell type analyzed represented as pie charts. Normalized as described in Methods a. A549 cells [1] b. HeLa [2] c. HCT116 Dicer-/ [3]d. HCT116 [3]e. TOV21G [1] f. HepG2 [4] g. Huh [2]

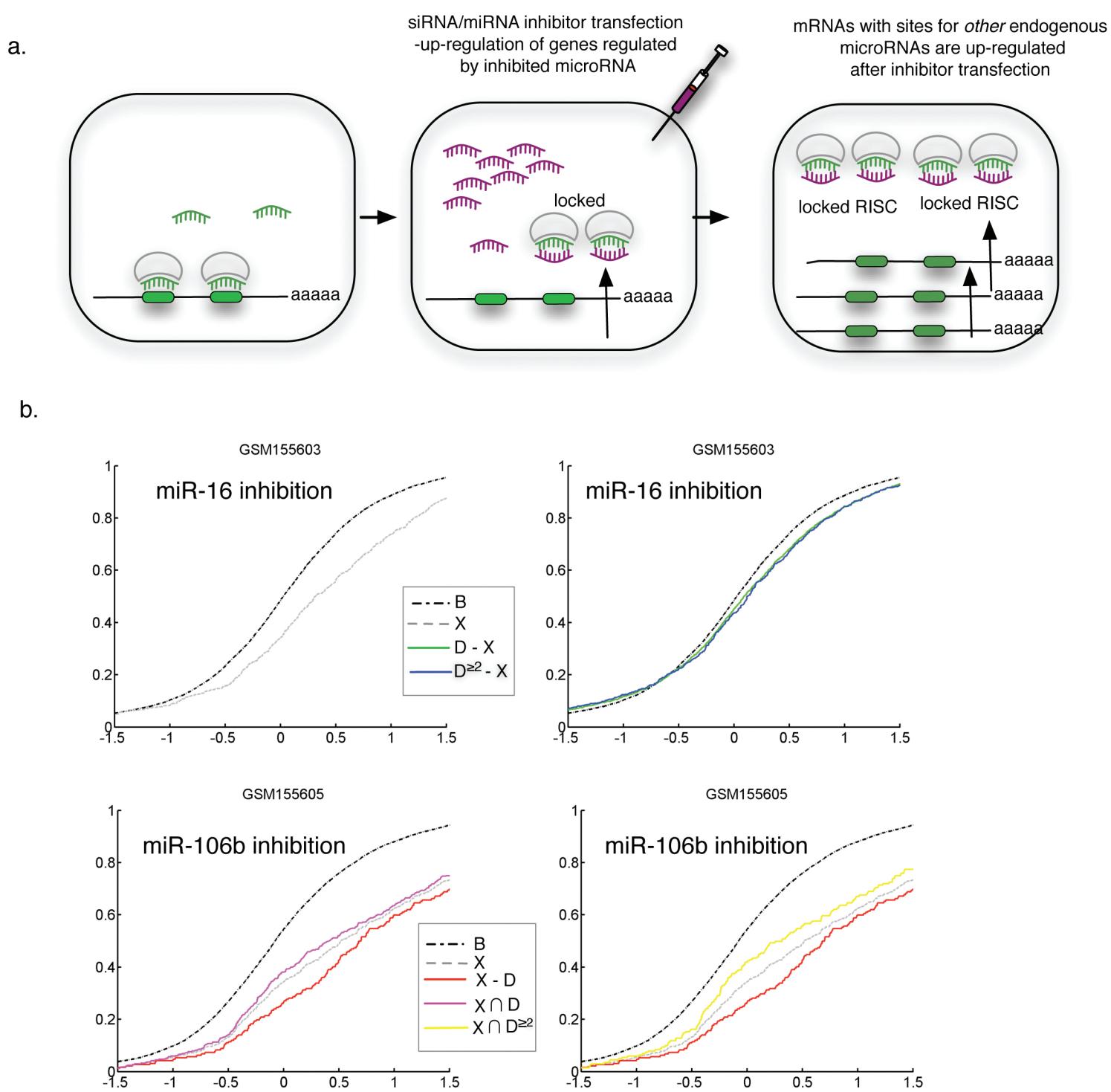
1. He, L., et al., A microRNA component of the p53 tumour suppressor network. *Nature*, 2007. 447(7148): p. 1130-4.
2. Landgraf, P., et al., A mammalian microRNA expression atlas based on small RNA library sequencing. *Cell*, 2007. 129(7): p. 1401-14.
3. Cummins, J.M., et al., The colorectal microRNAome. *Proc Natl Acad Sci U S A*, 2006. 103(10): p. 3687-92.
4. Wang, X. and X. Wang, Systematic identification of microRNA functions by combining target prediction and expression profiling. *Nucleic Acids Res*, 2006. 34(5): p. 1646-52.

Supplementary Figure 5. Genes that are up-regulated after small RNA transfections are overrepresented in cell cycle genes and oncogenes



Supplementary Figure 5. Genes that are up-regulated after small RNA transfections. **a.** Examples of genes that are up-regulated in experiments when they contain sites for endogenous miRNAs and not the transfected miRNA. Colors of endogenous sites match expression profile shown (representation of relative expression of top 10 families of miRNAs in HeLa cells [22]); grey sites represent transfected miRNA sites. Only sites for endogenous or transfected miRNAs are shown. **b.** Venn diagrams showing overlap between genes with endogenous miRNA target sites in HeLa cells (D) and cell cycle genes or oncogenes; the significance of the overlap is assessed by Fisher's exact test.

Supplementary Figure 6. Other endogenous microRNAs are up-regulated after inhibition of one particular endogenous microRNA



Supplementary Figure 6. Other endogenous microRNA target genes are up-regulated after inhibition of one particular endogenous microRNA. a. Schematic of hypothesis consistent with these inhibition results b. Cumulative probability distributions of gene expression changes for the inhibition of miR-16 and miR 106b [5], colors as in Supp. Figure 4.

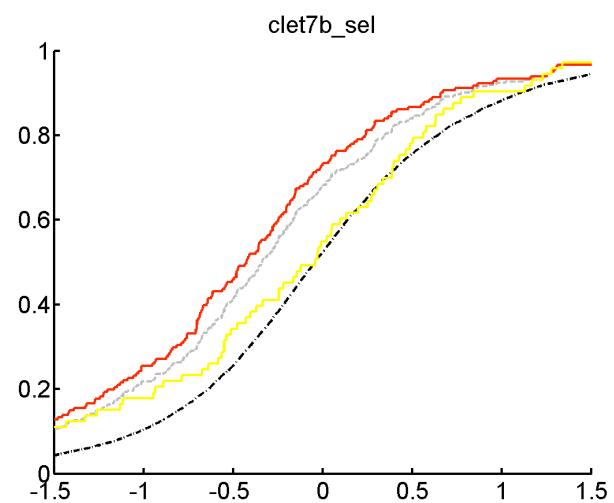
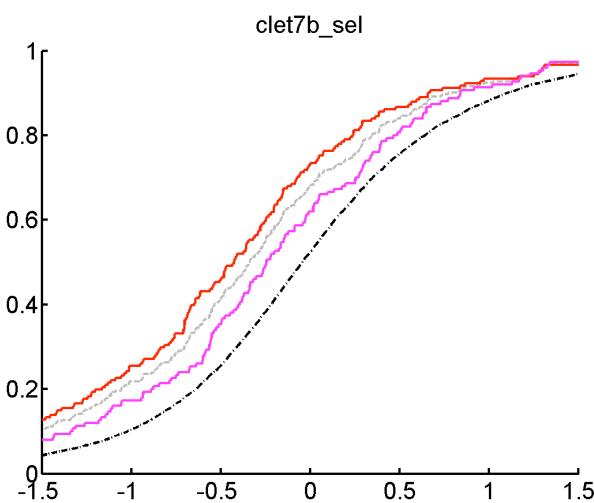
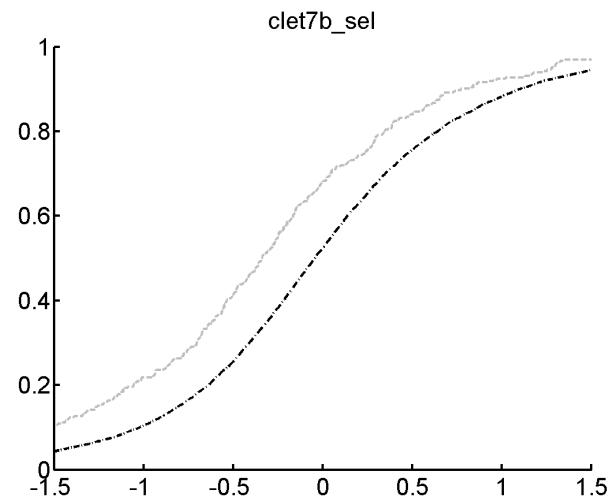
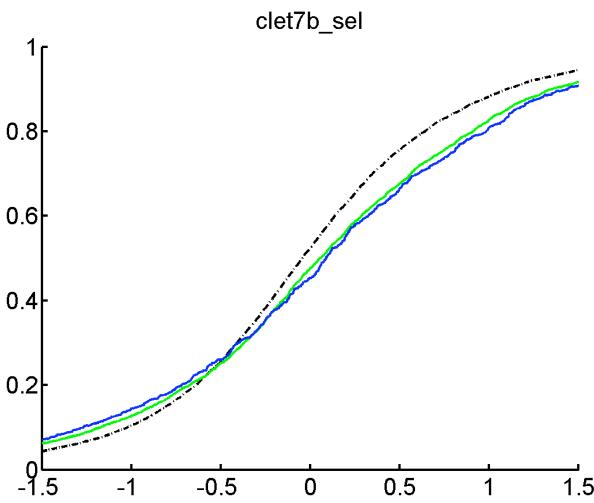
5. Linsley, P.S., et al., Transcripts targeted by the microRNA-16 family cooperatively regulate cell cycle progression. Mol Cell Biol, 2007. 27(6): p. 2240-52.

Supplementary Figure 4. Plots of all experiments

Supplementary Figure 4. Cumulative probability distributions of gene expression changes for all experiments described in Supplementary Table 2. We include (i) (D-X) vs B (green vs black), ($D \geq 2 - X$) vs B (blue vs black), (ii) X vs B (grey vs black), (iii) (X-D) versus ($X \cap D$) (red vs magenta), (iv) (X-D) versus ($X \cap D \geq 2$), (red vs yellow) for each of the analyzed experiments

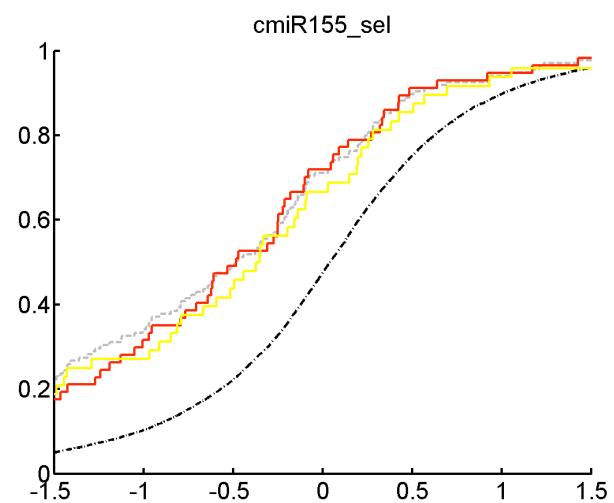
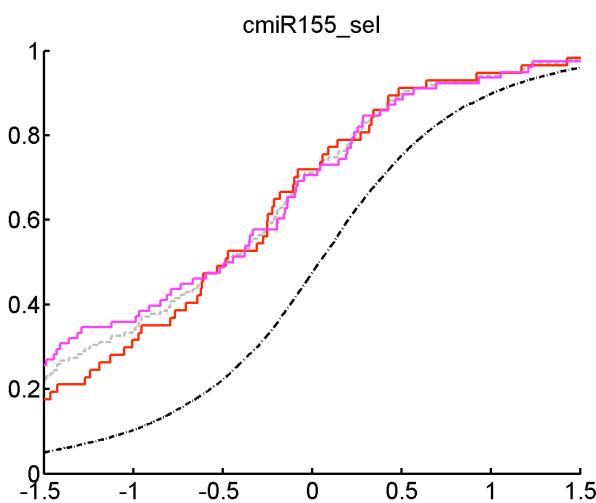
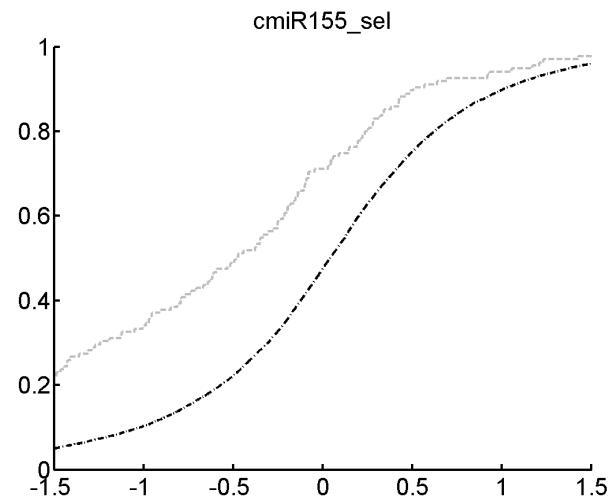
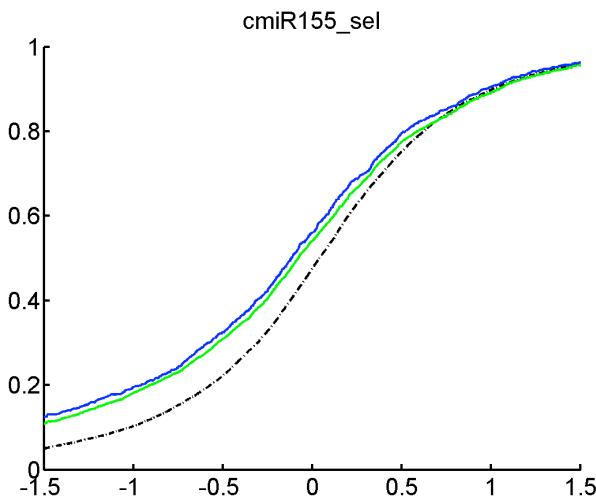
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mi/siRNA: let-7b



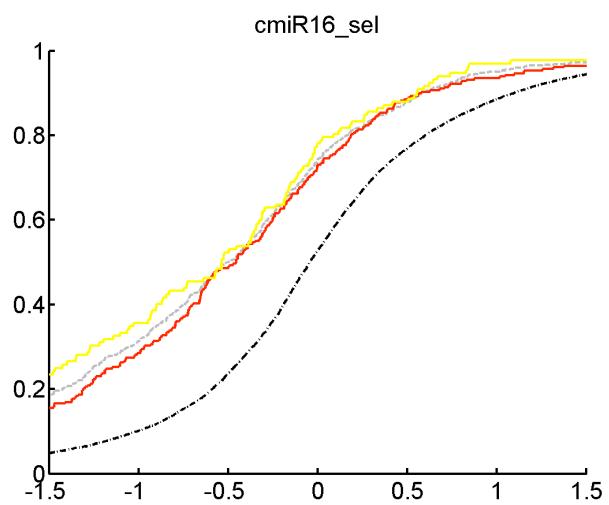
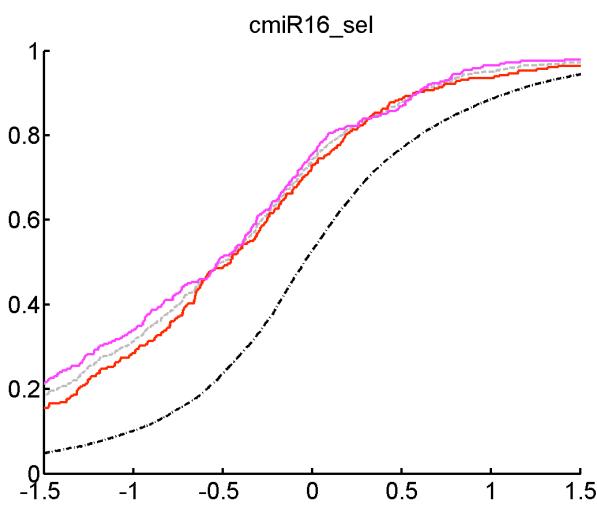
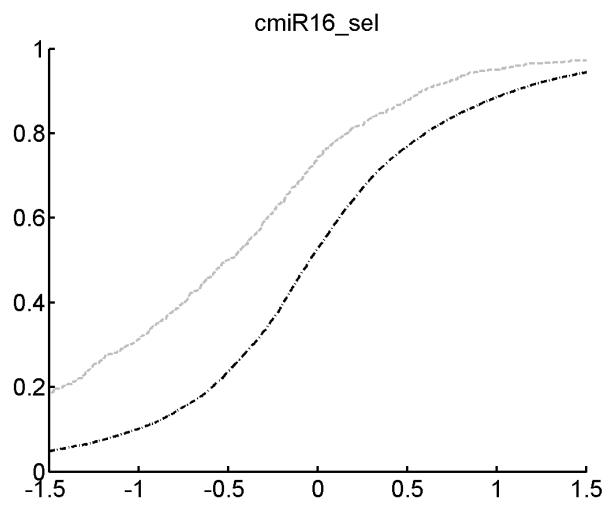
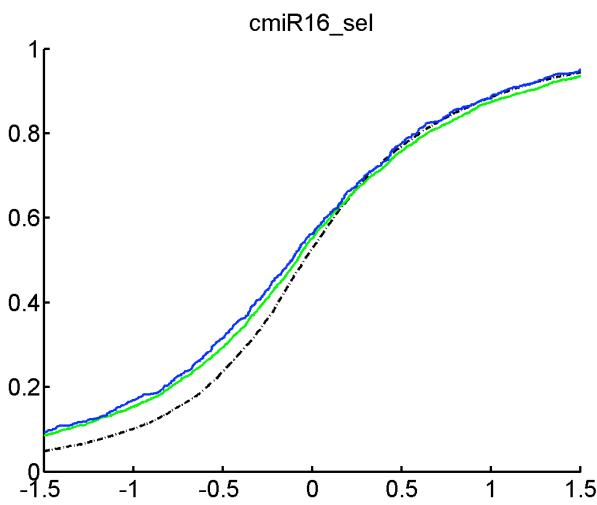
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mi/siRNA: miR-155



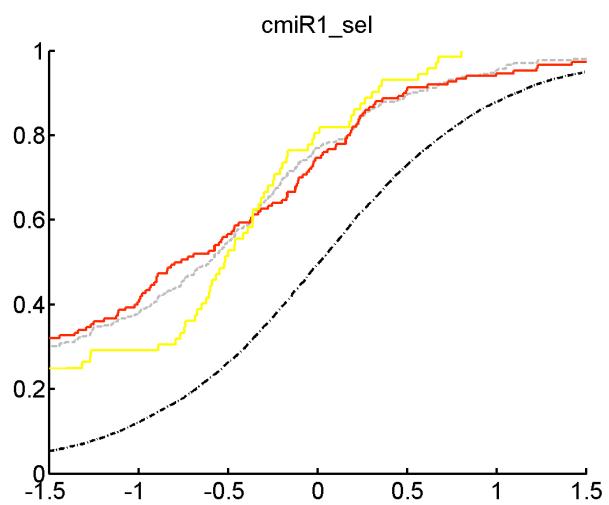
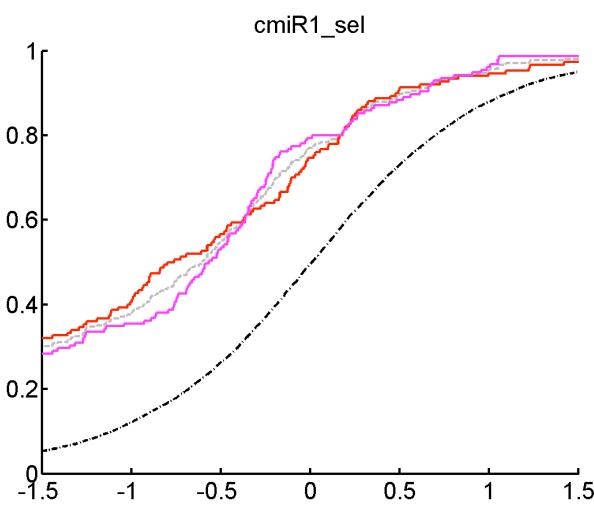
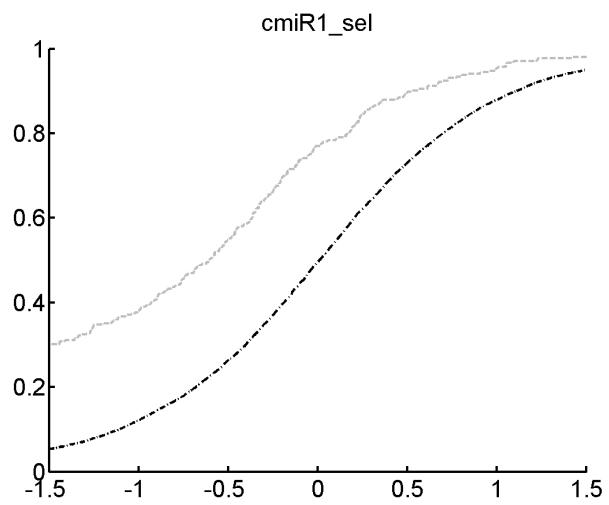
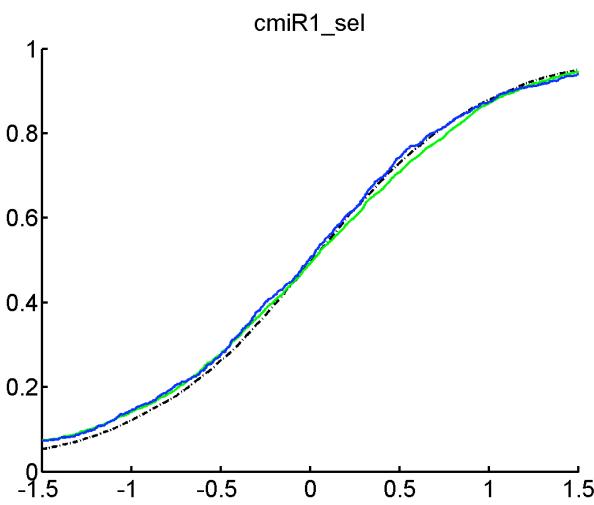
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mi/siRNA: miR-16



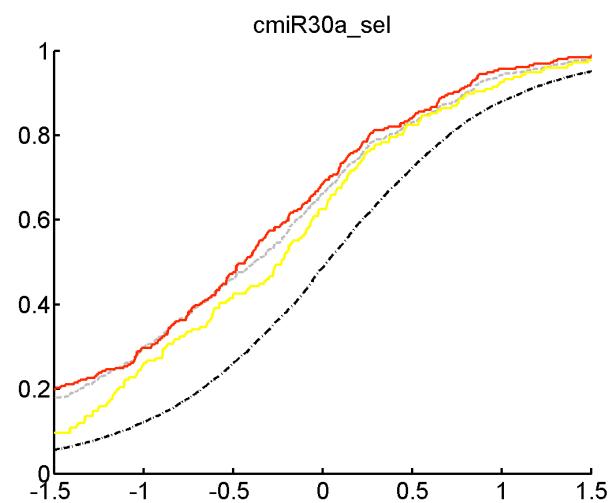
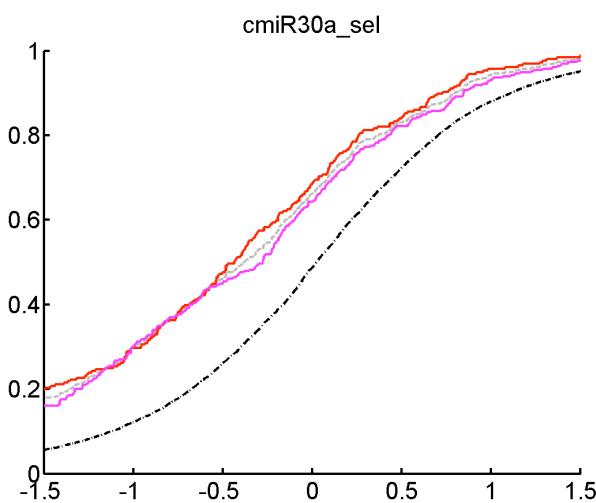
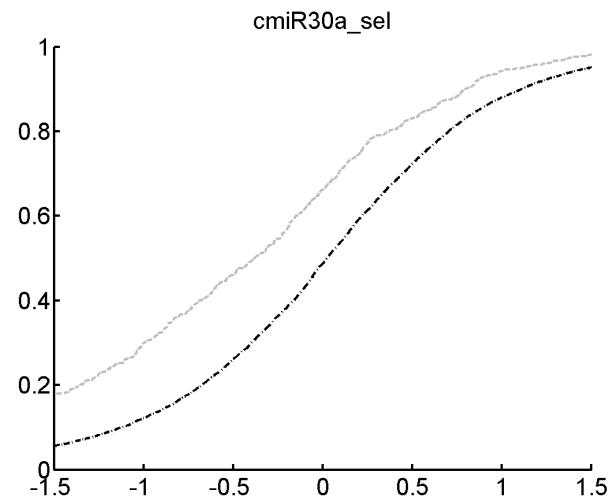
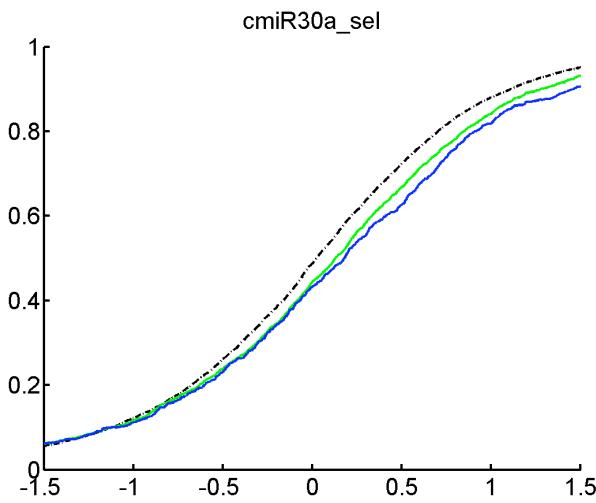
Experiment: cmiR1-sel

mi/siRNA: miR-1



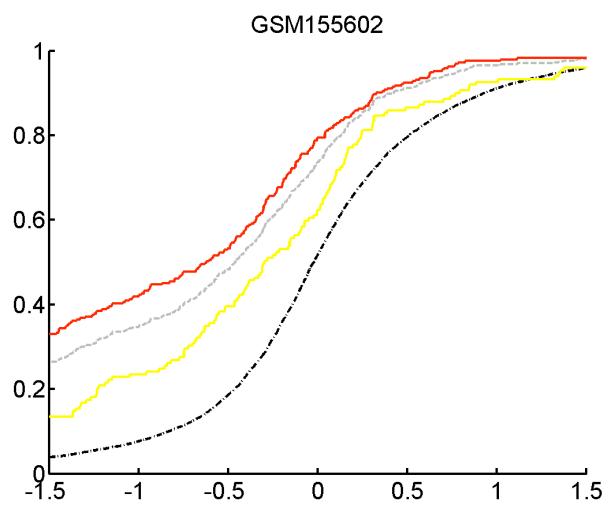
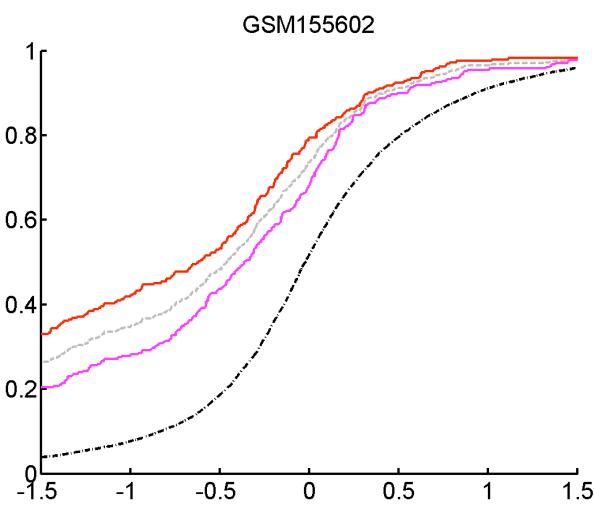
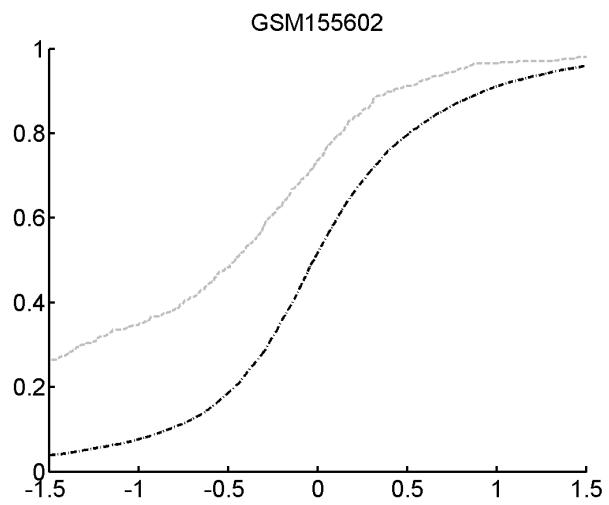
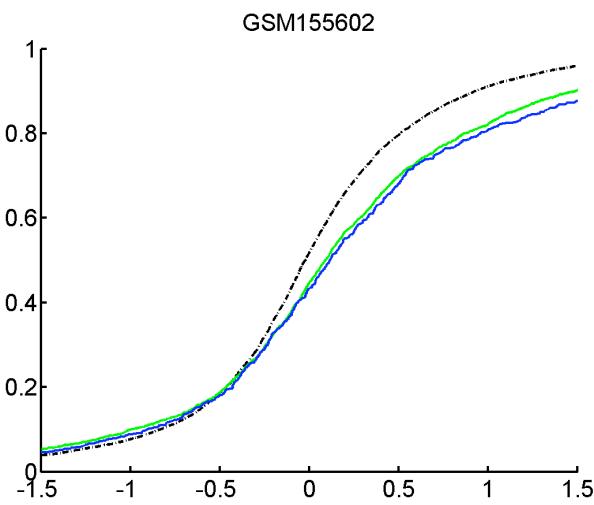
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mi/siRNA: miR-30a



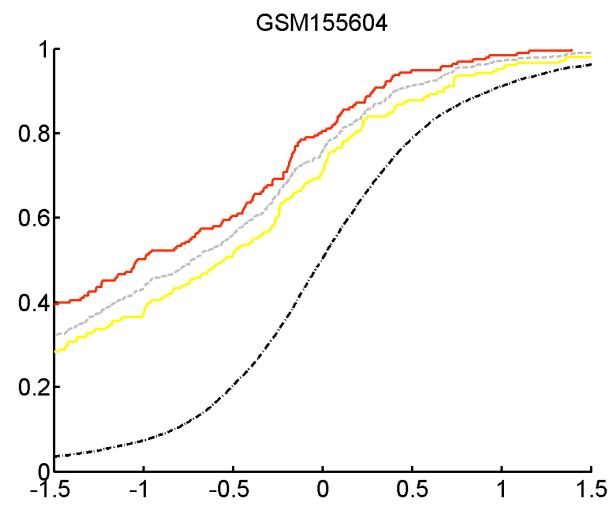
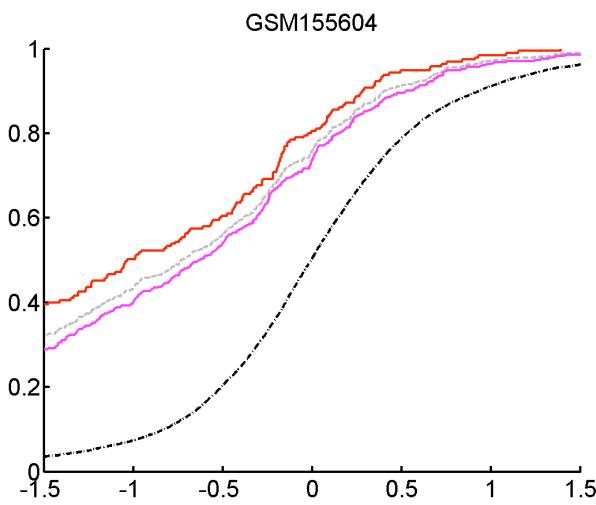
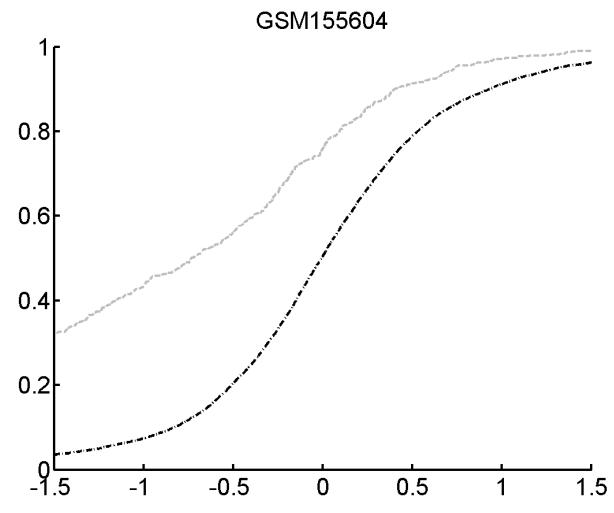
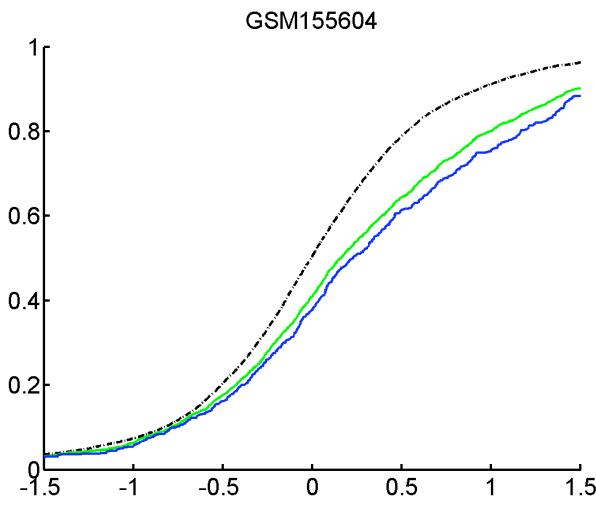
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mi/siRNA: miR-16



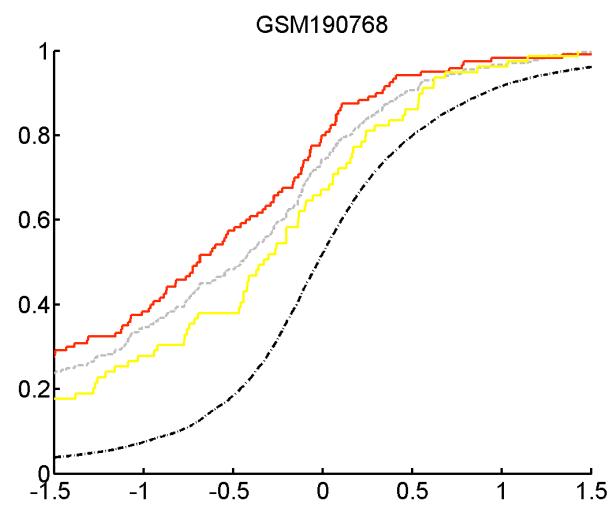
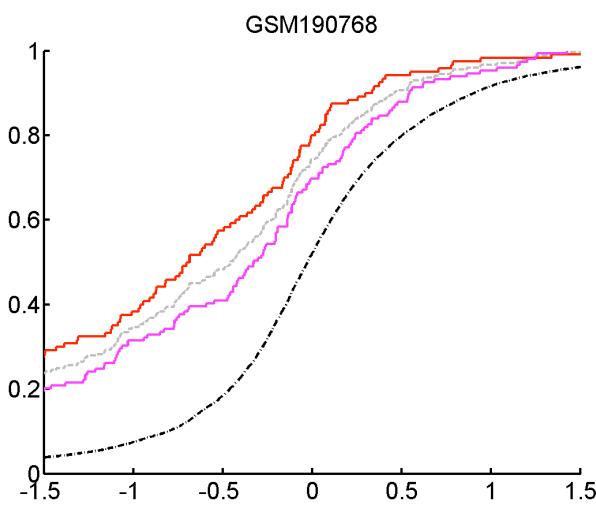
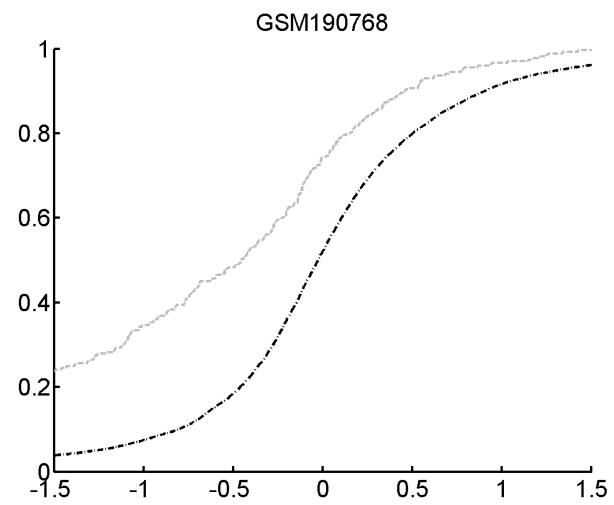
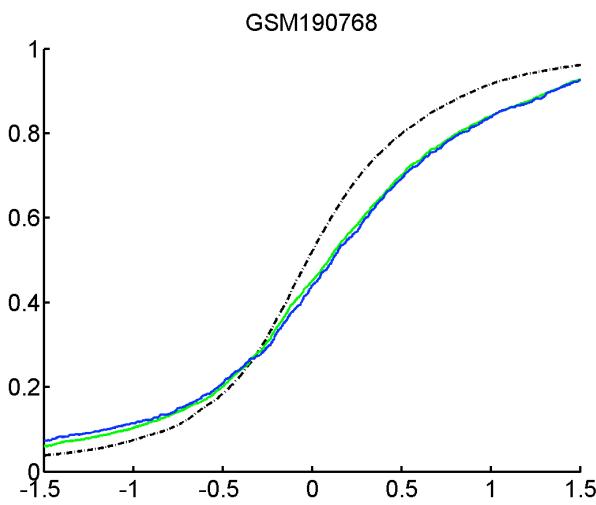
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mi/siRNA: miR-106b



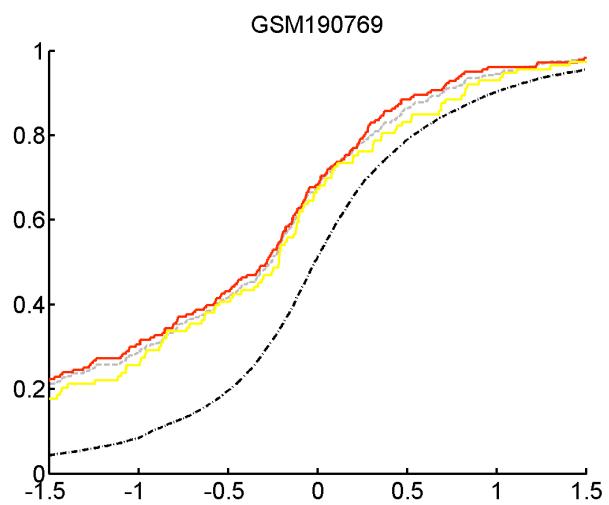
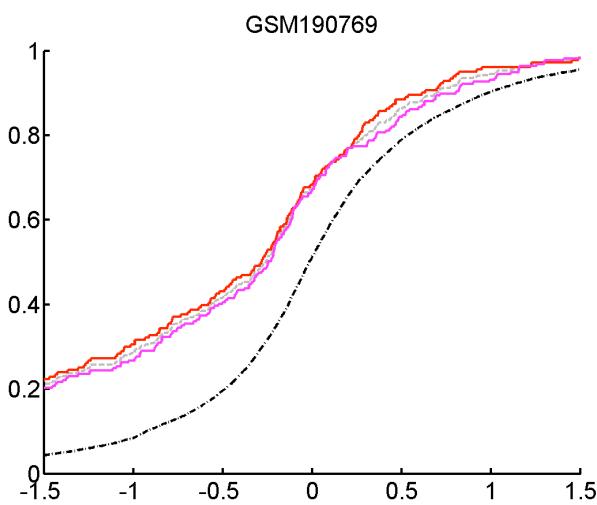
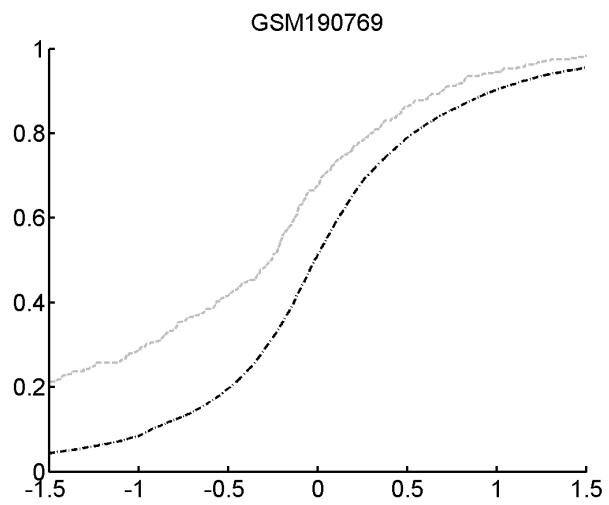
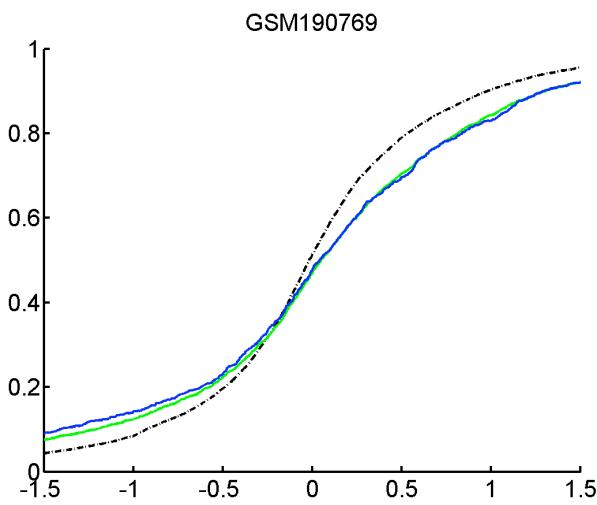
Experiment: GSM190768

mi/siRNA: mir-34a



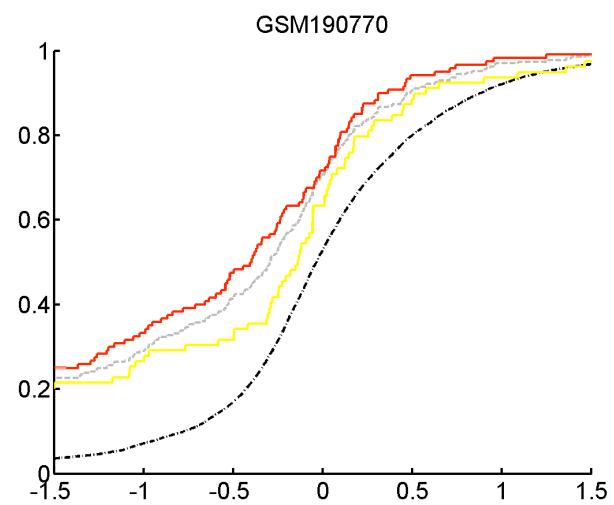
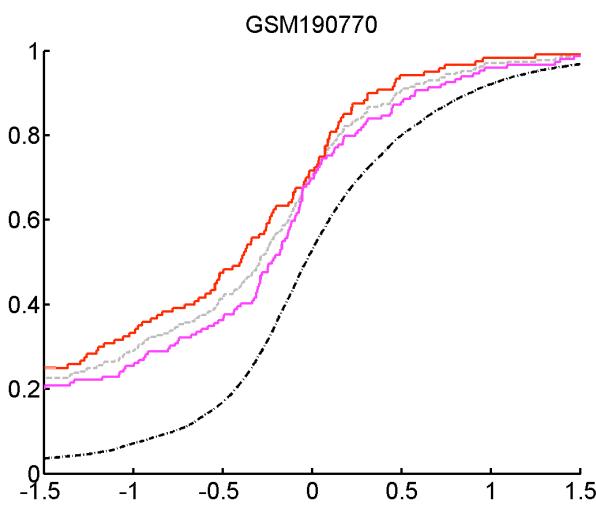
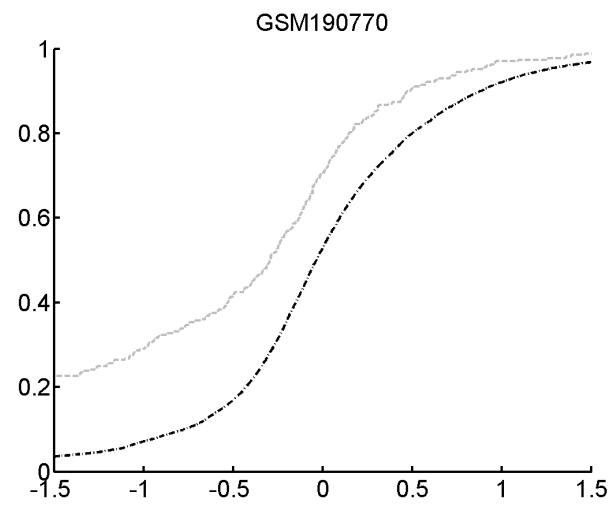
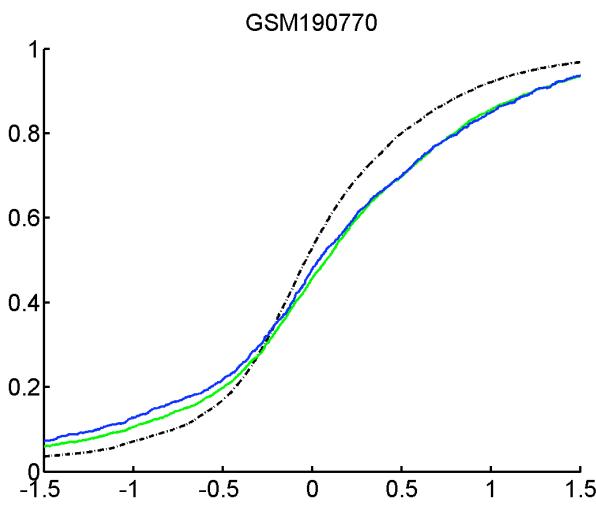
Experiment: GSM190769

mi/siRNA: mir-34b



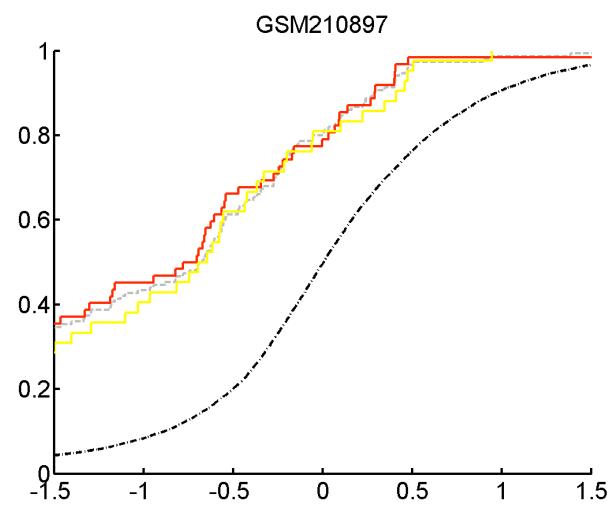
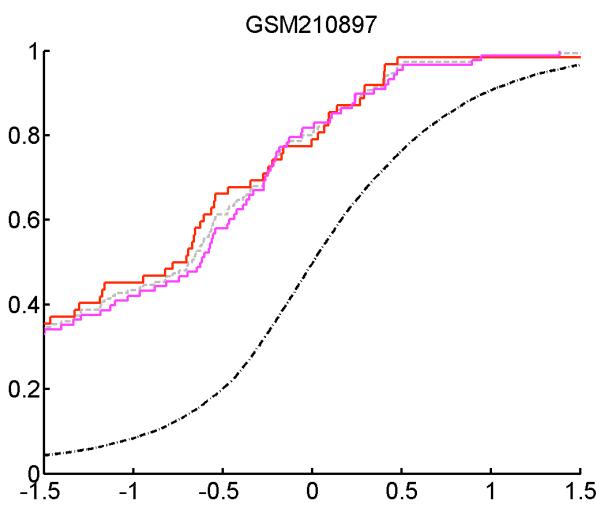
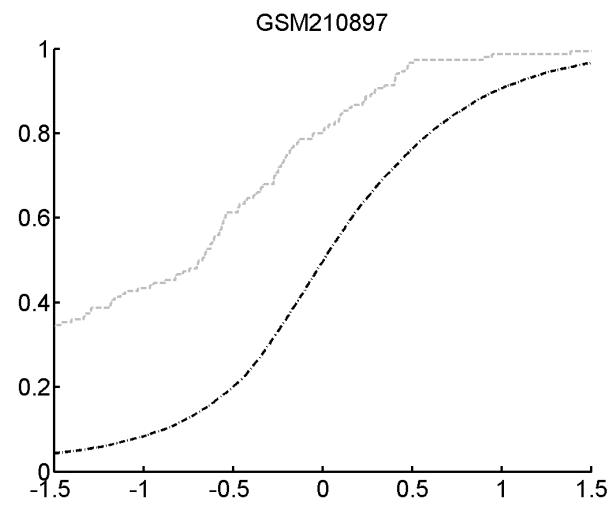
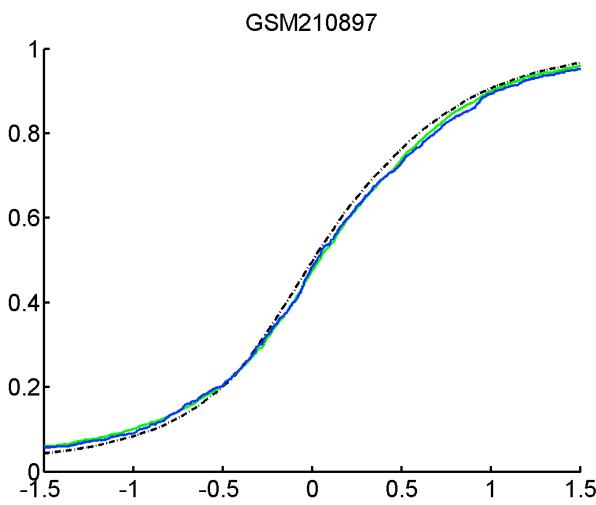
Experiment: GSM190770

mi/siRNA: mir-34c



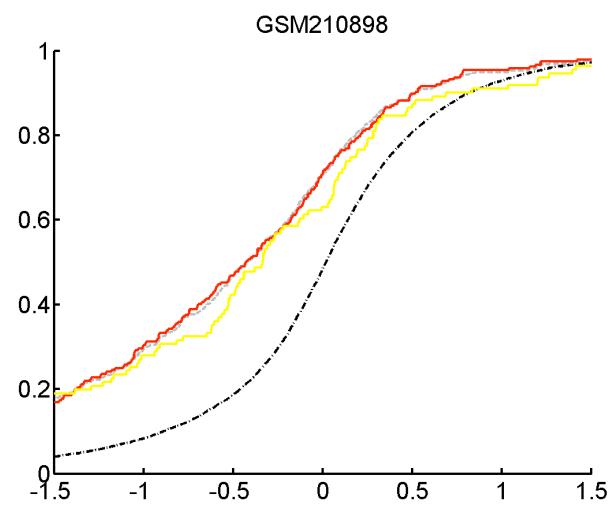
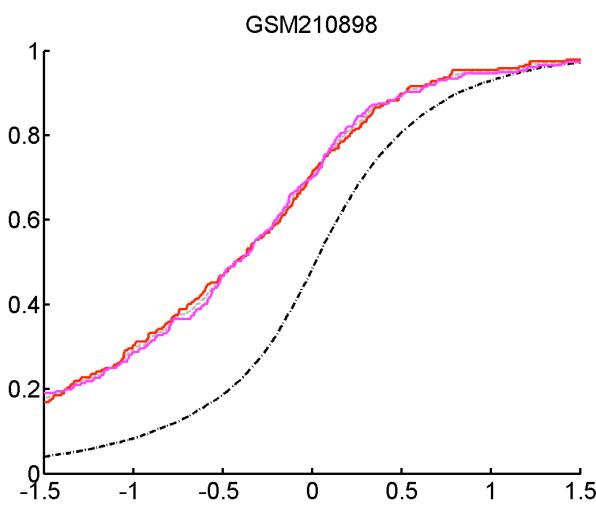
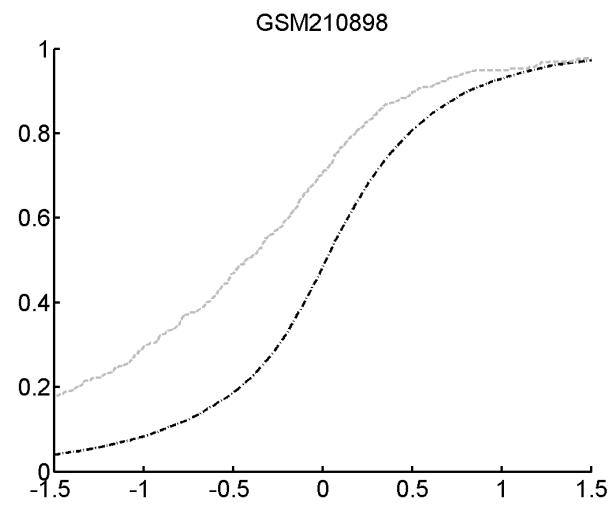
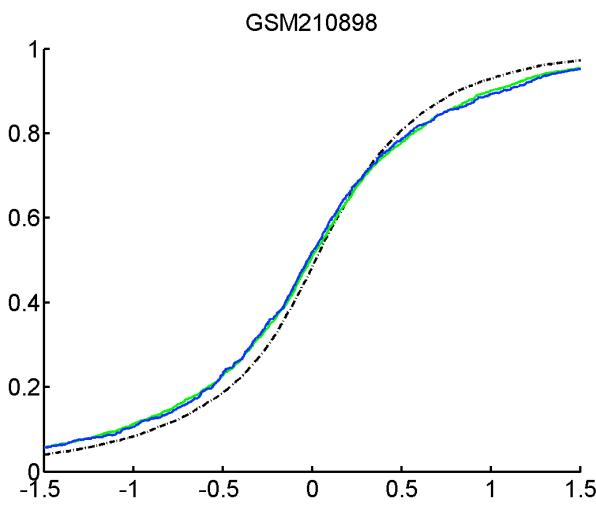
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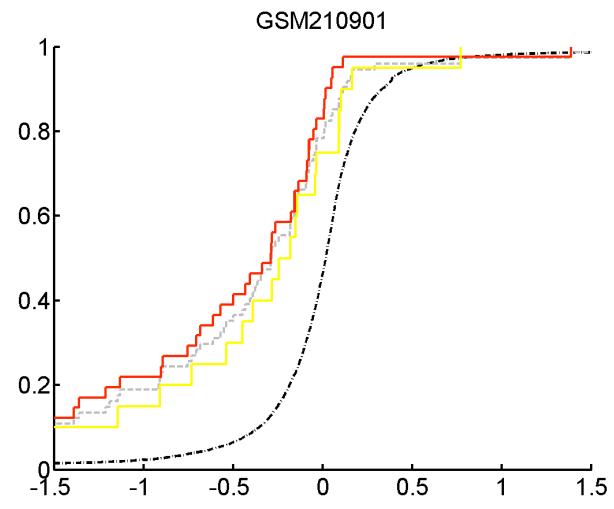
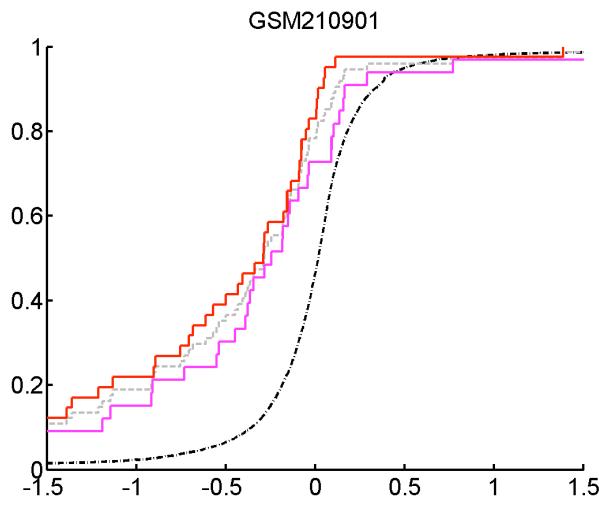
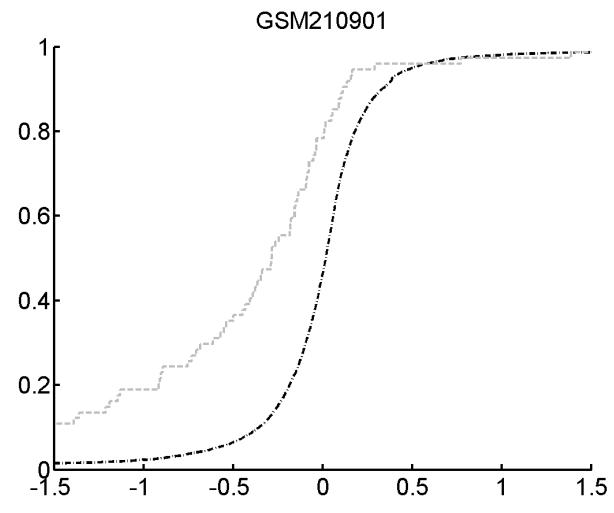
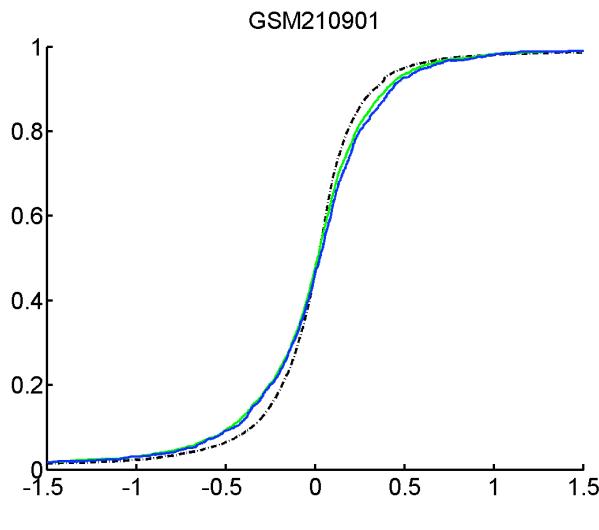
mi/siRNA: miR-7



Experiment: GSM210898

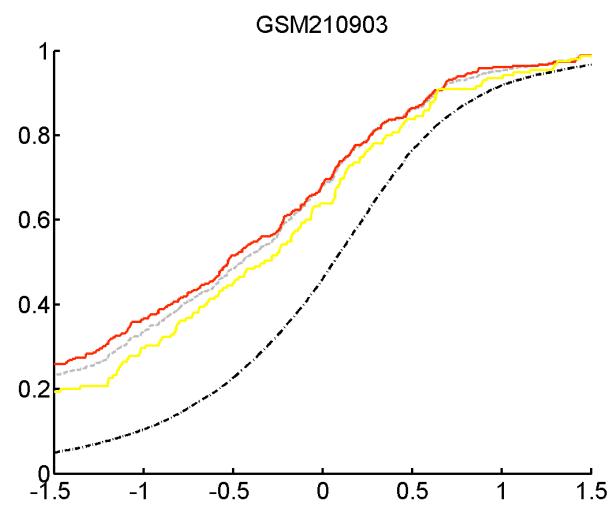
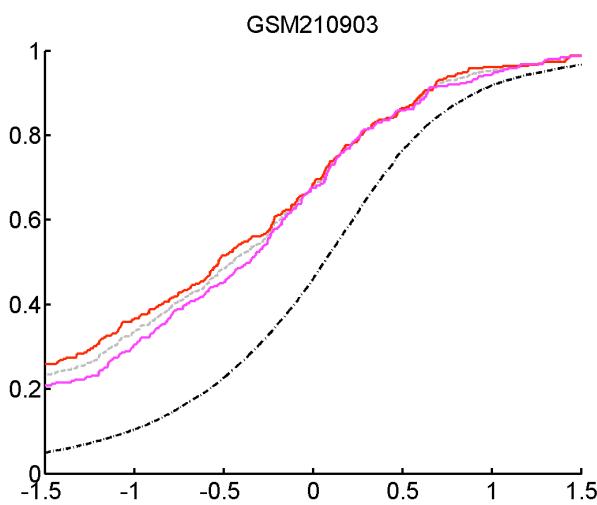
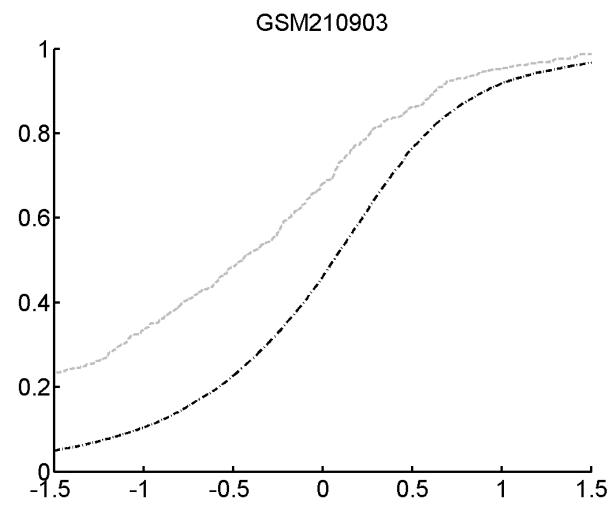
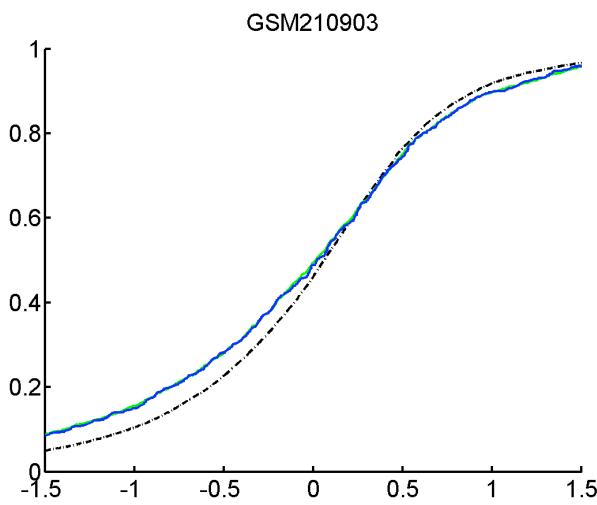
mi/siRNA: miR-9





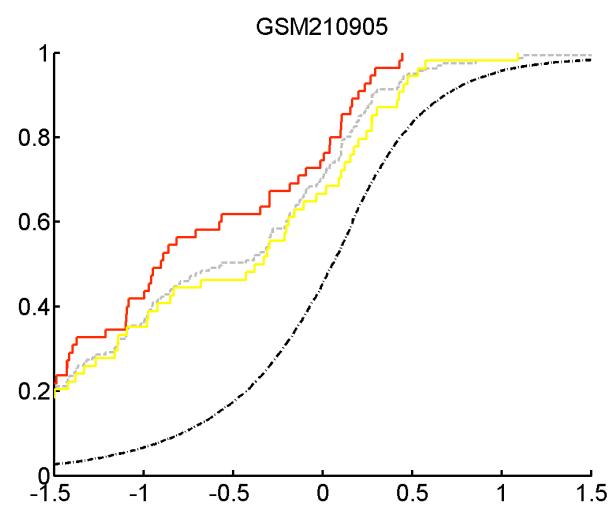
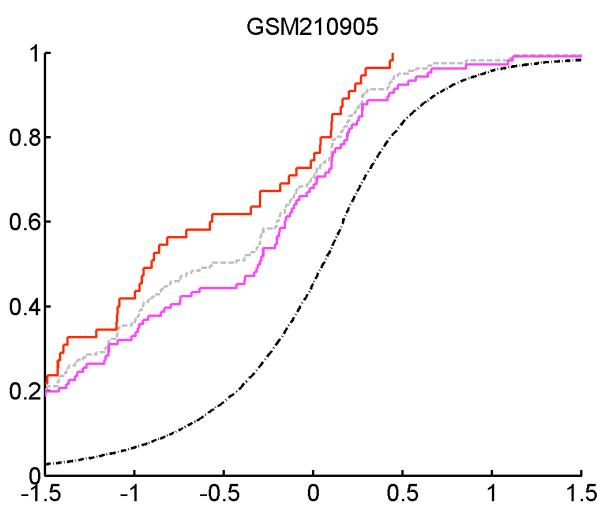
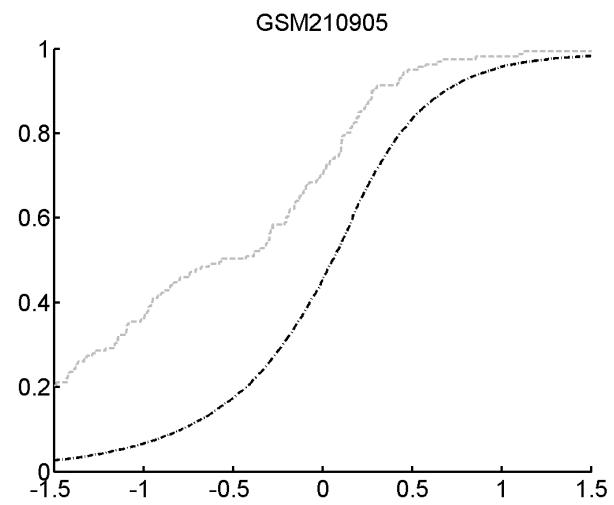
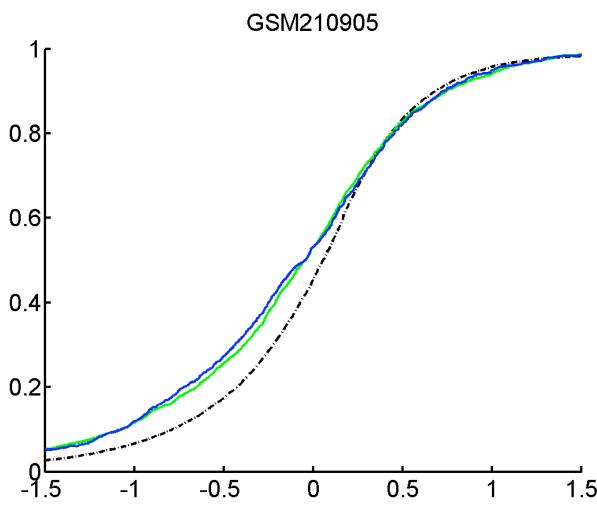
Experiment: GSM210903

mi/siRNA: miR-128a



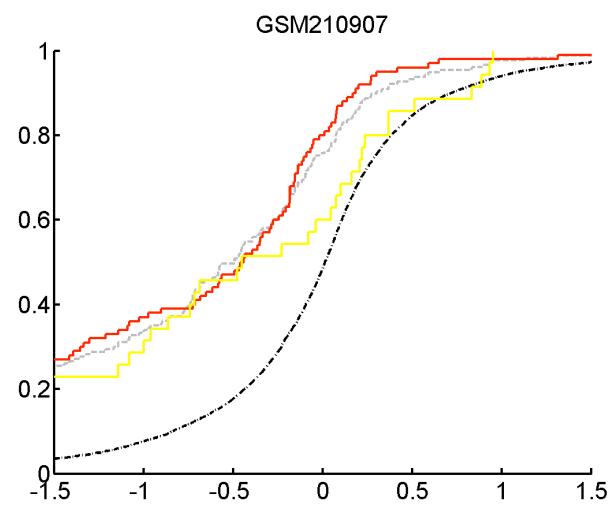
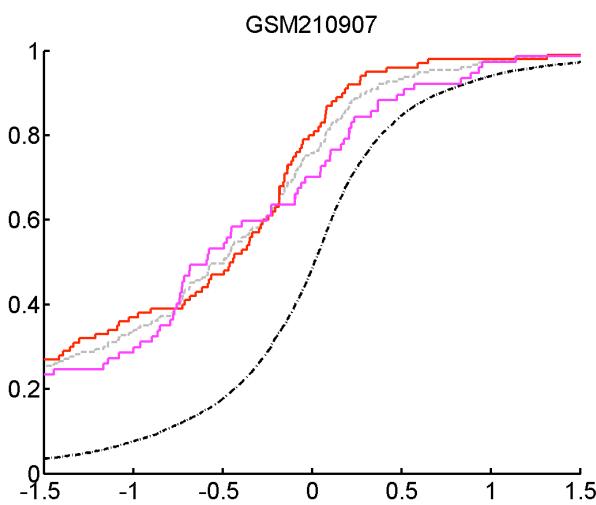
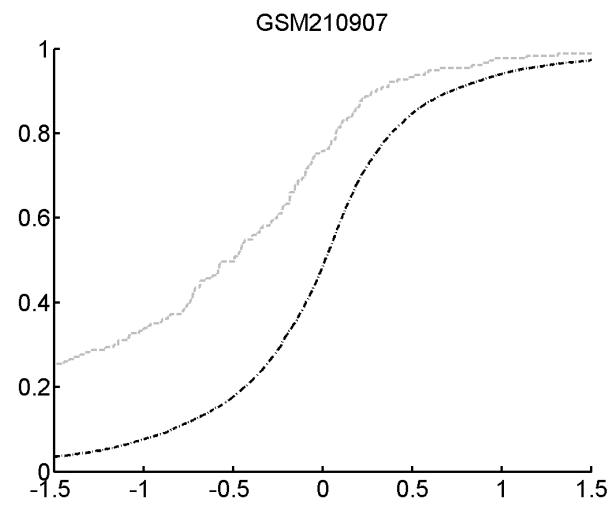
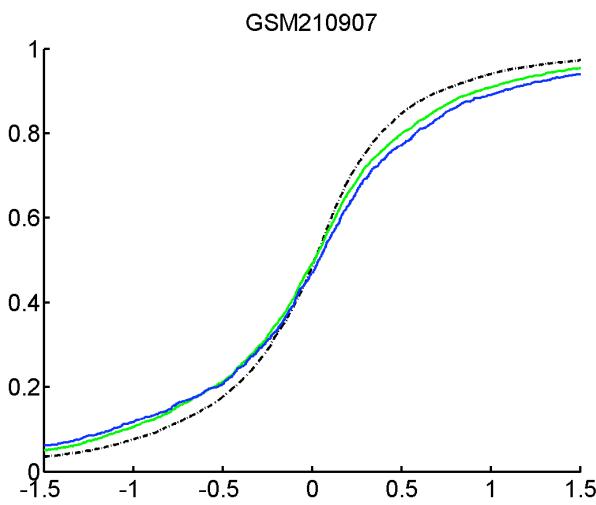
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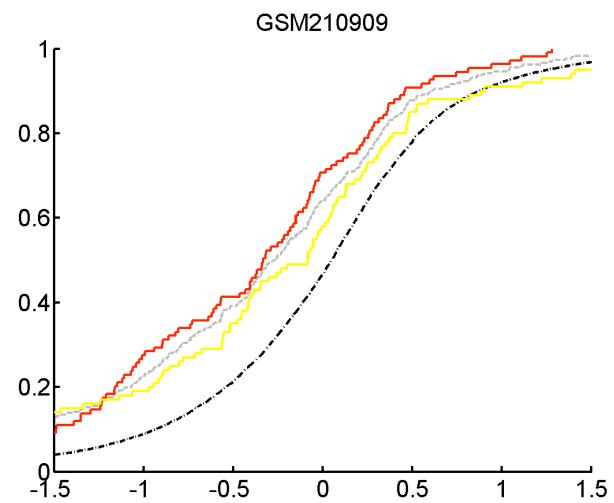
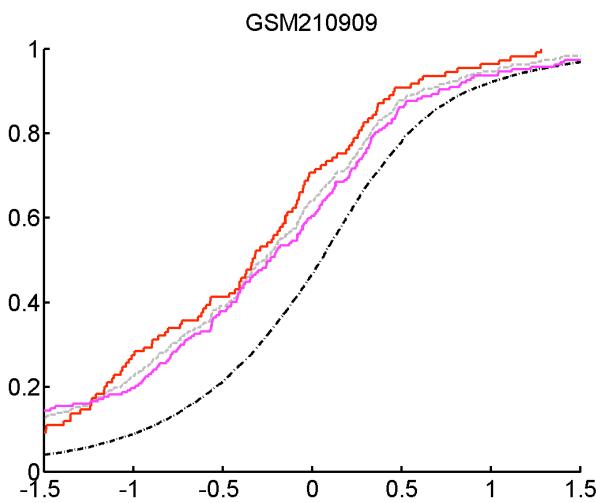
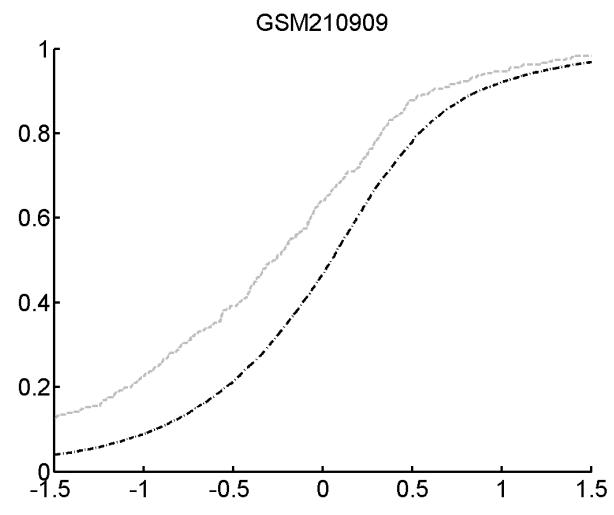
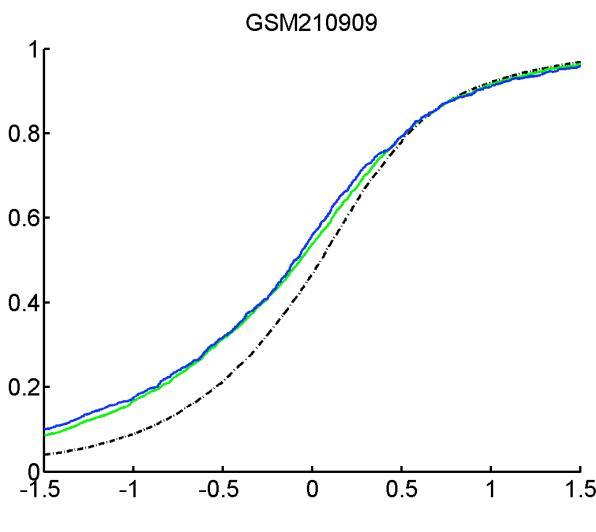
mi/siRNA: miR-132



Experiment: GSM210907

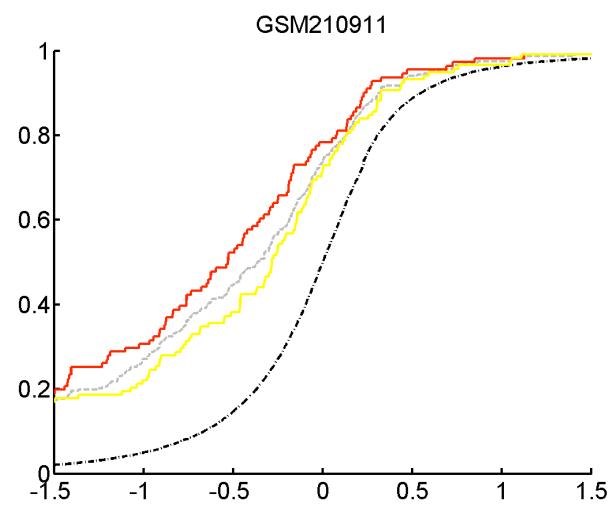
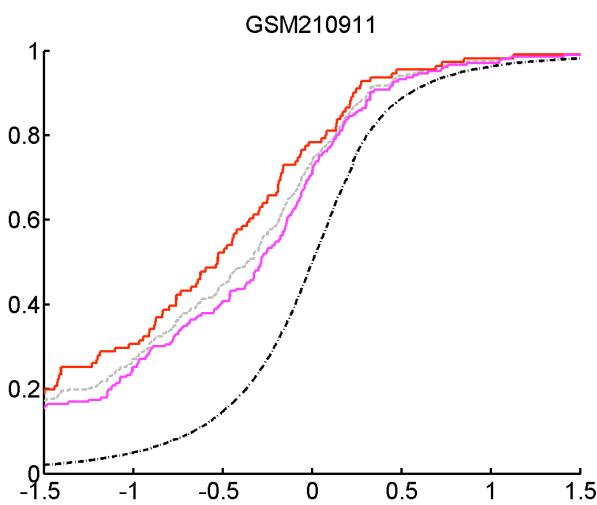
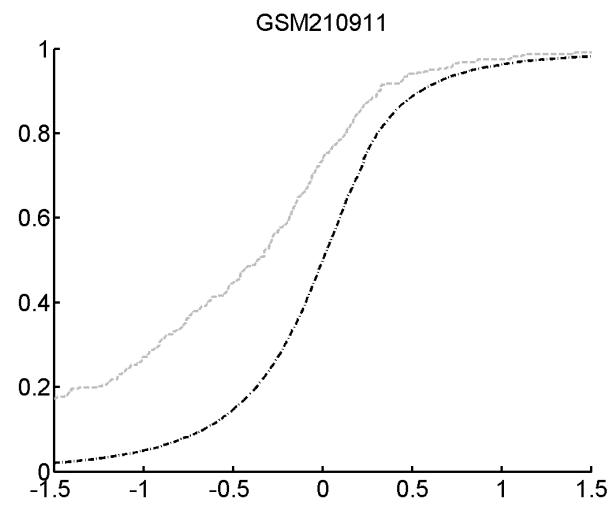
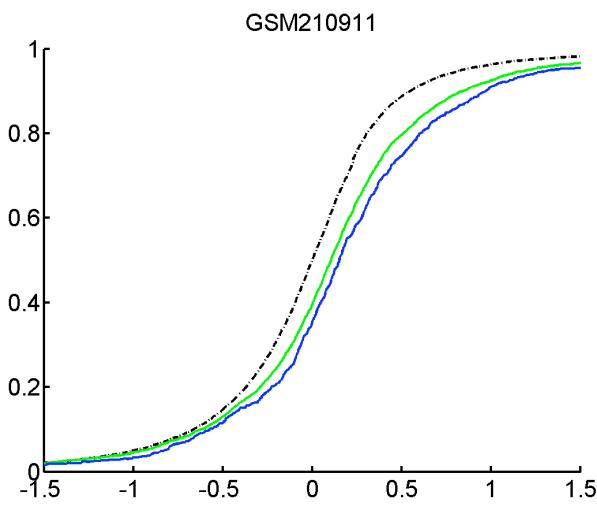
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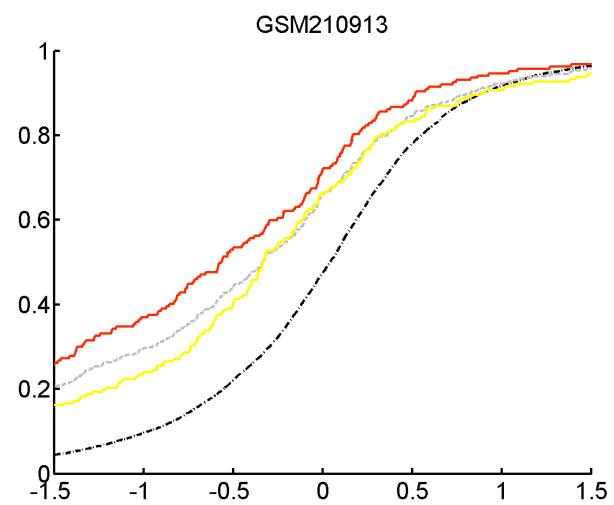
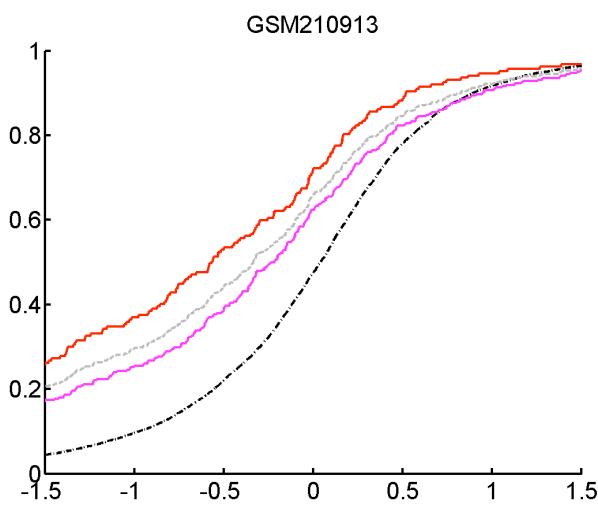
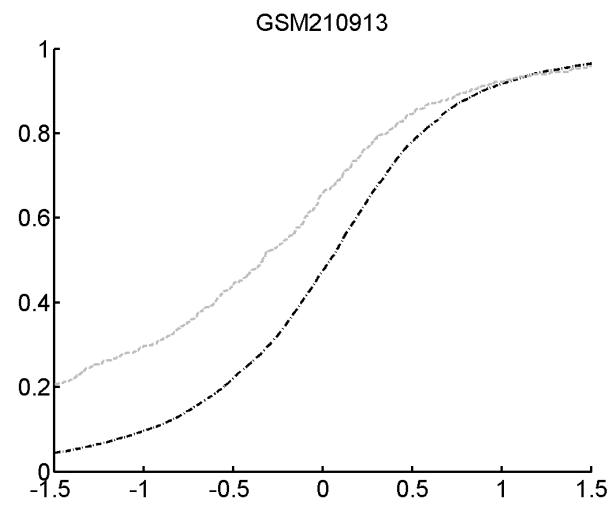
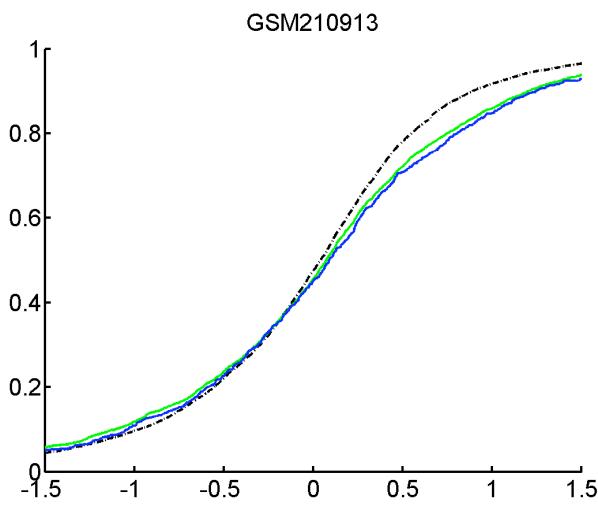
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mi/siRNA: miR-148b



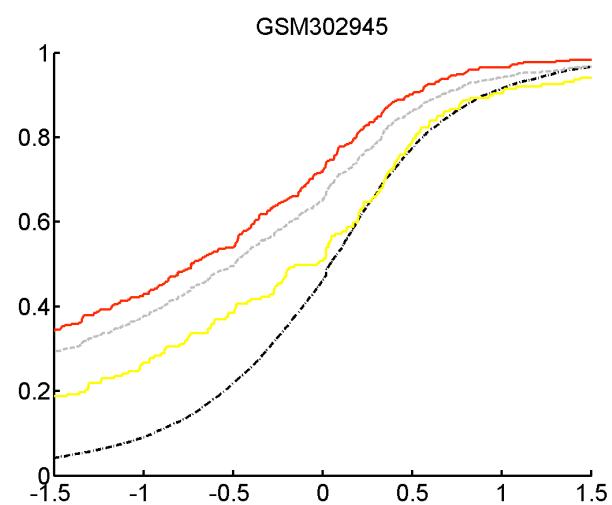
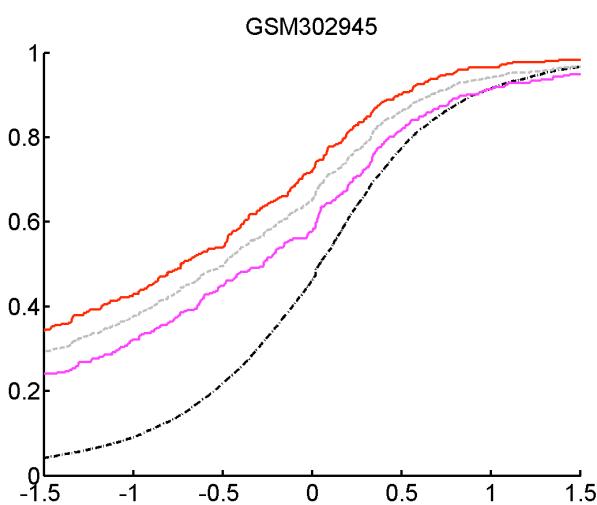
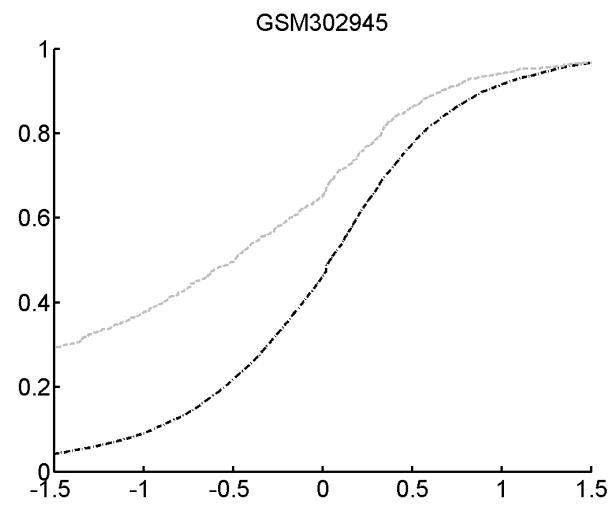
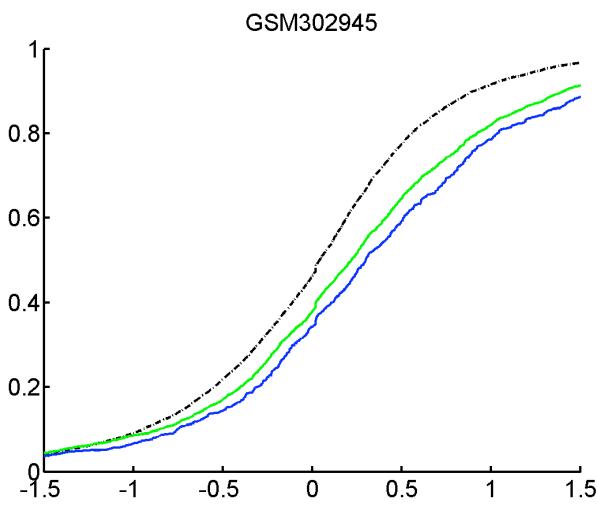
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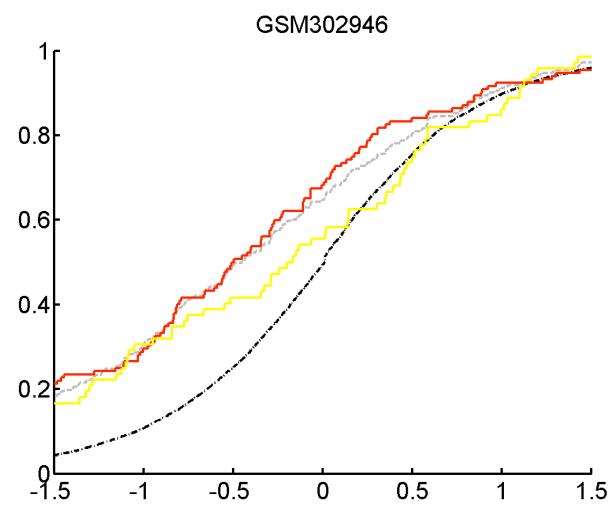
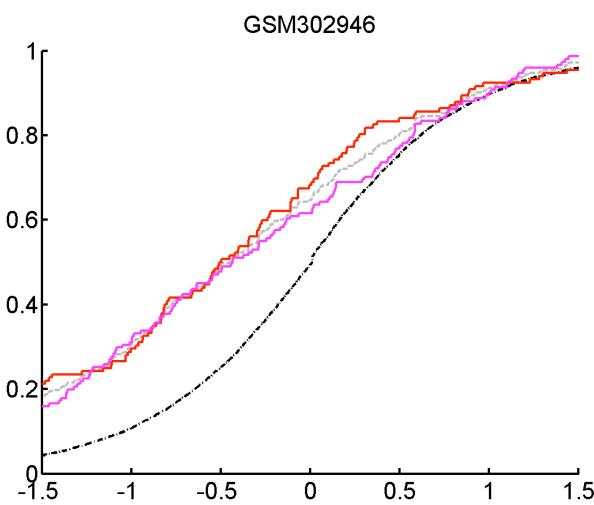
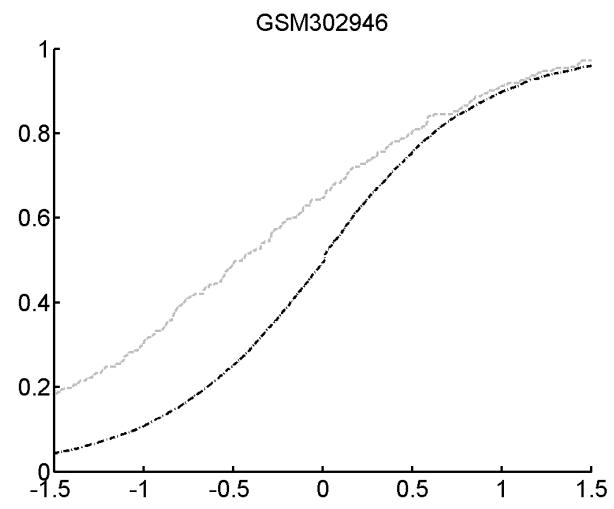
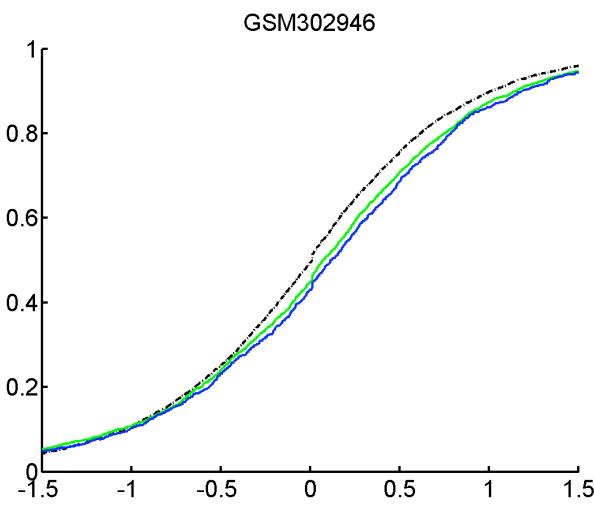
mi/siRNA: miR-181a



Experiment: GSM302945

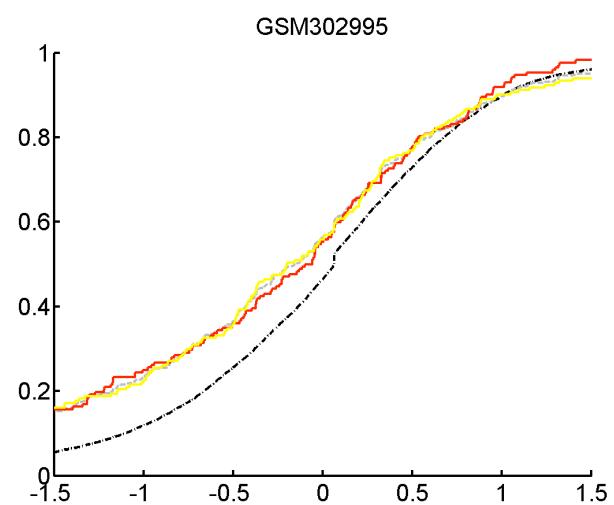
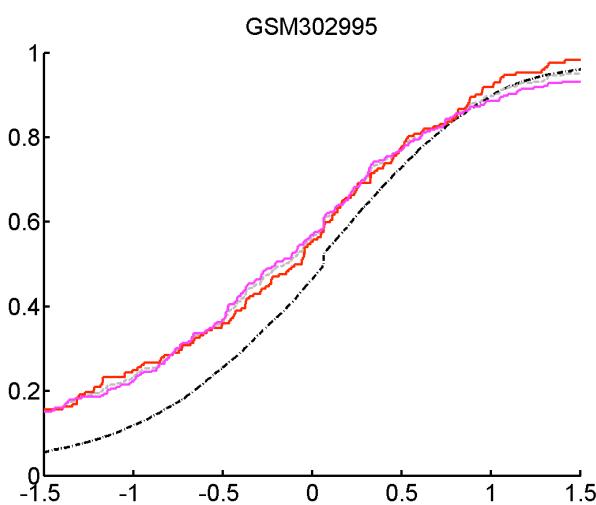
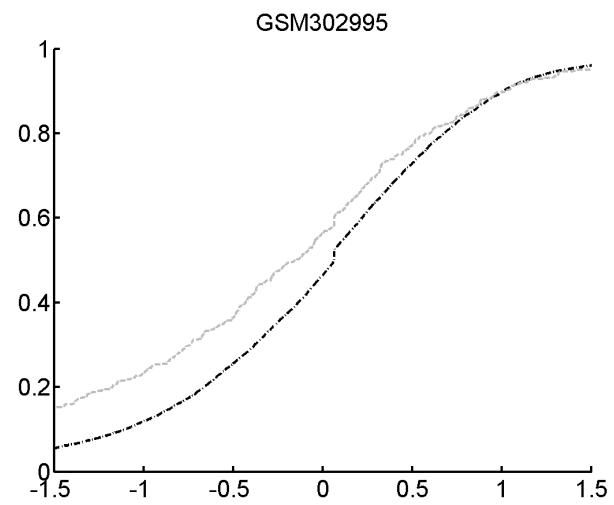
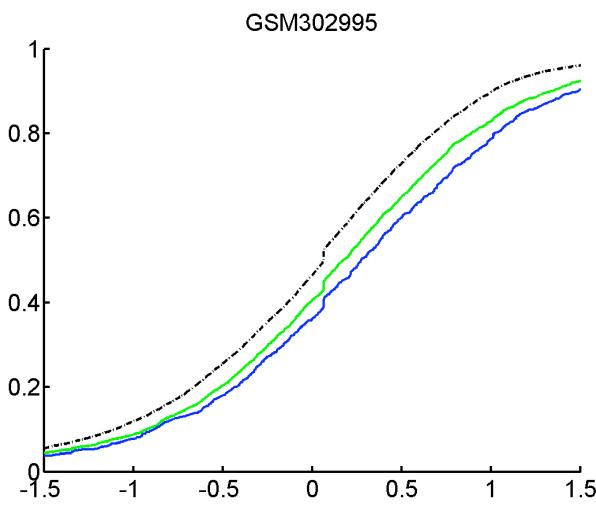
mi/siRNA: miR-124





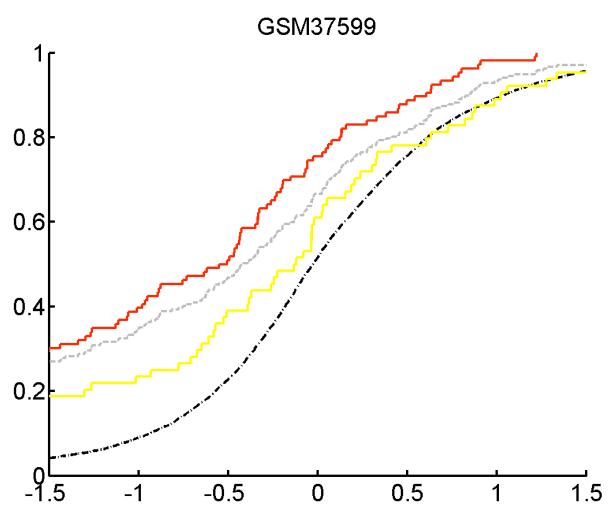
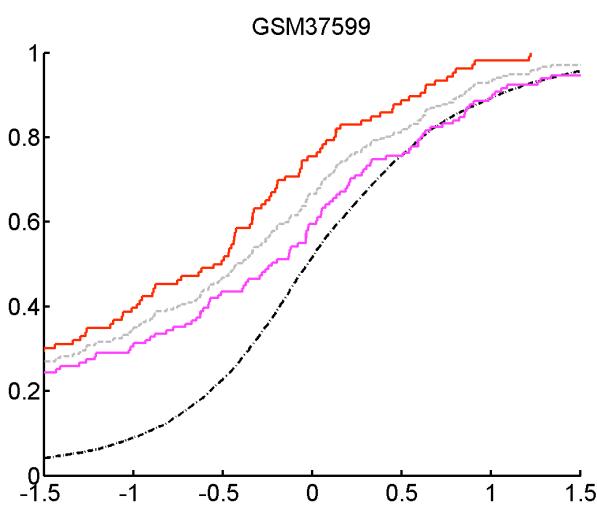
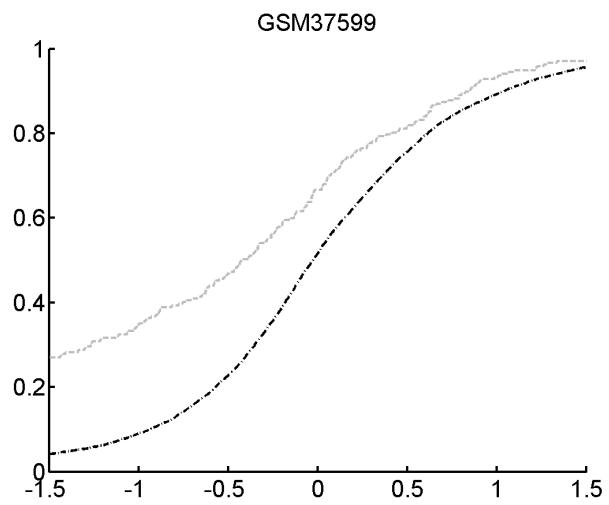
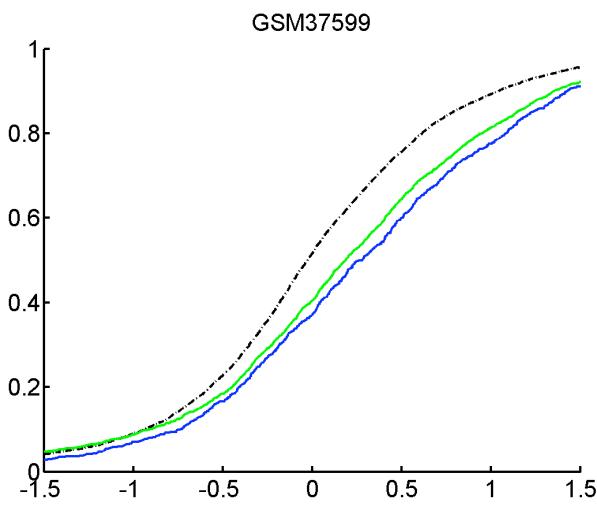
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mi/siRNA: miR-181



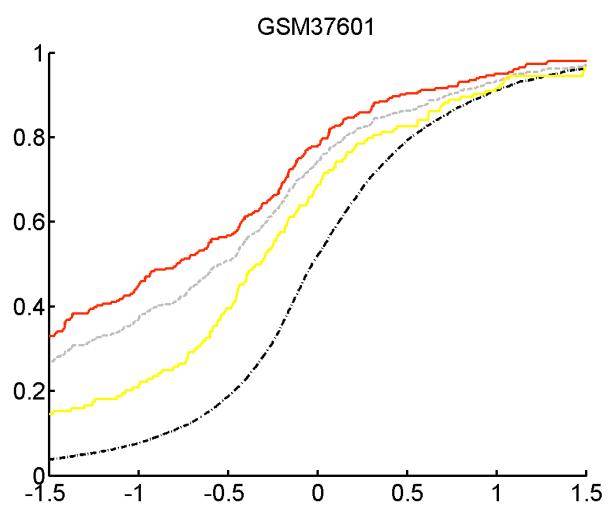
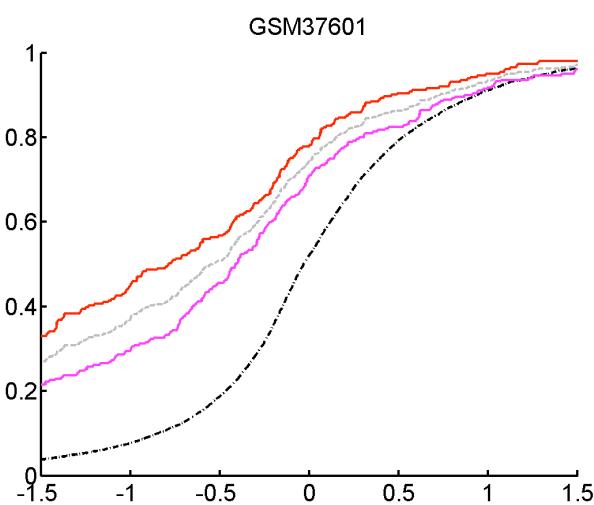
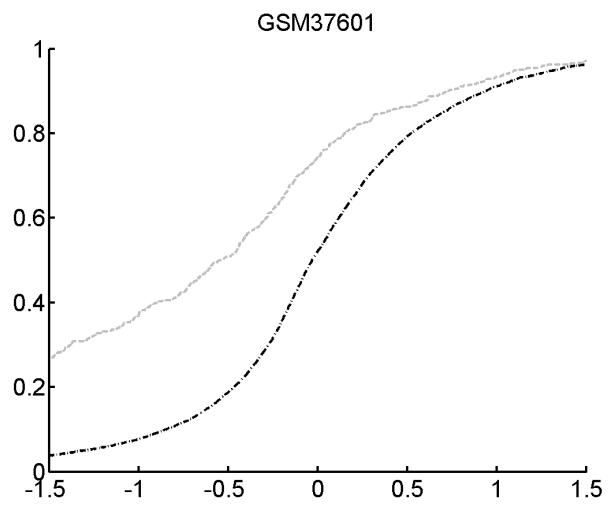
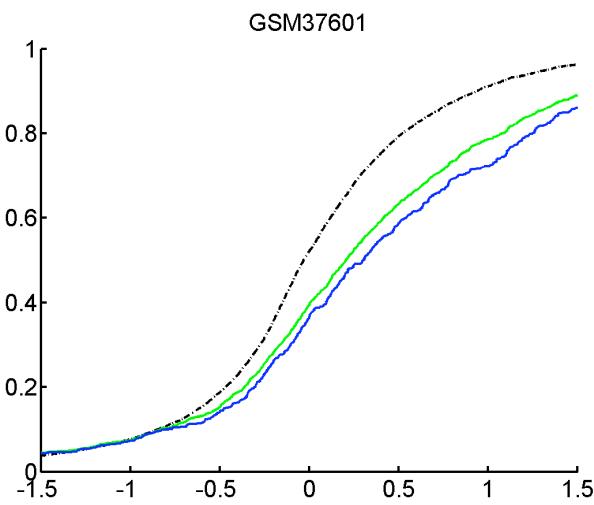
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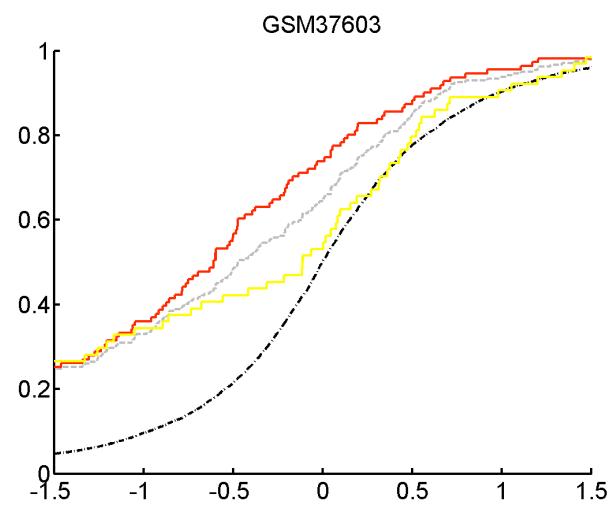
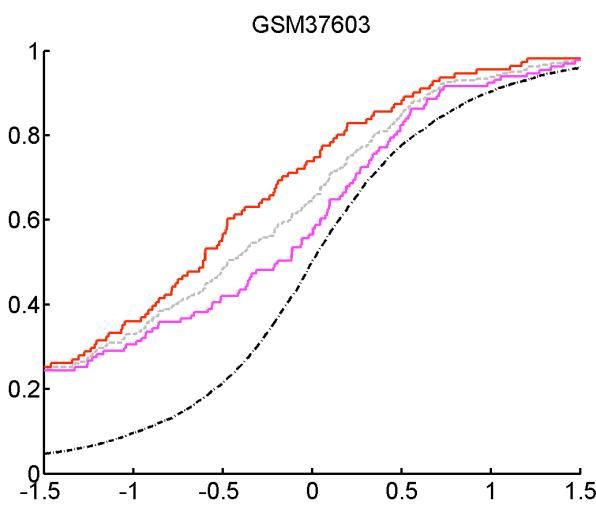
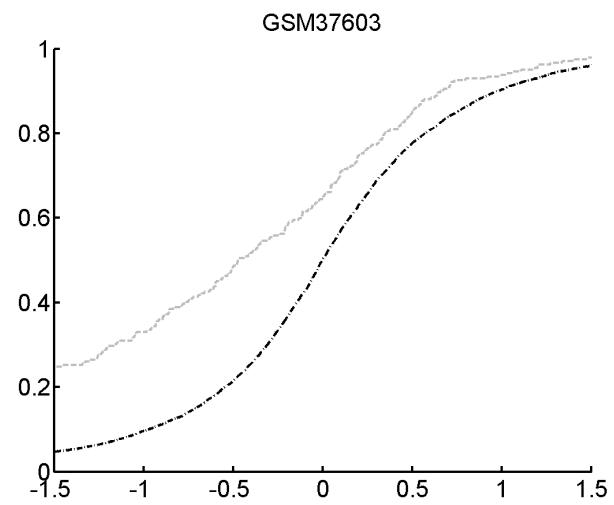
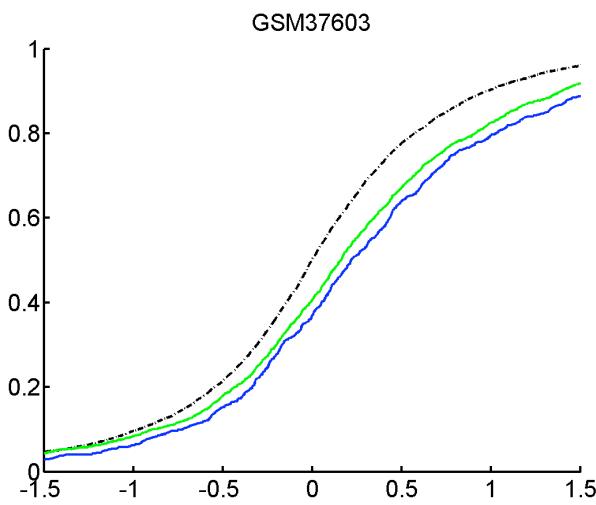
mi/siRNA: miR-1



Experiment: GSM37601

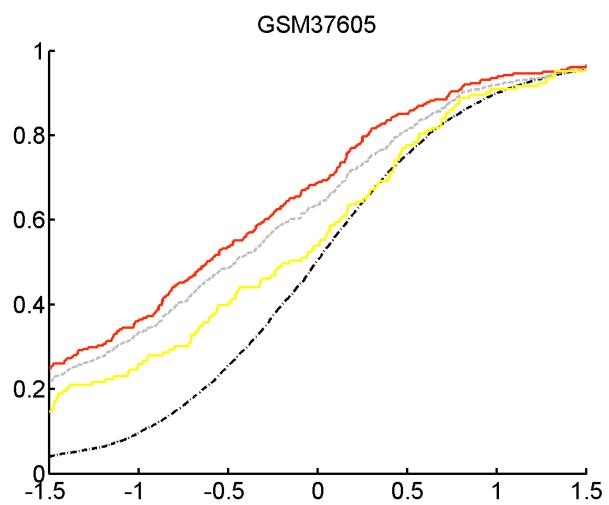
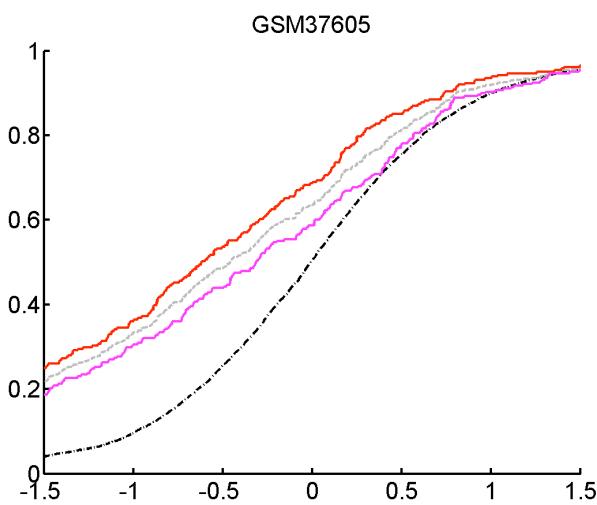
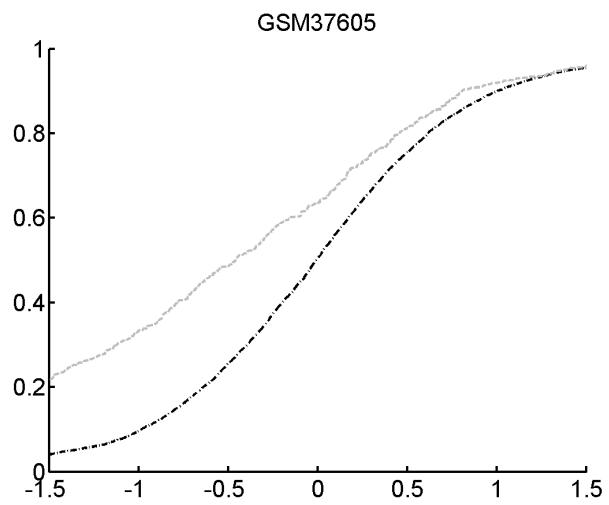
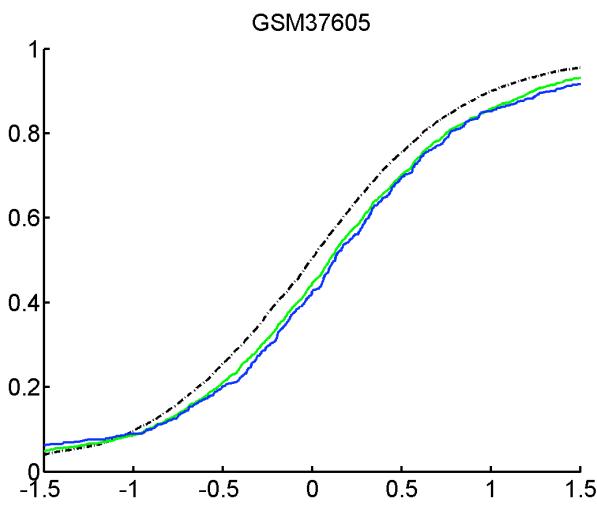
mi/siRNA: miR-124





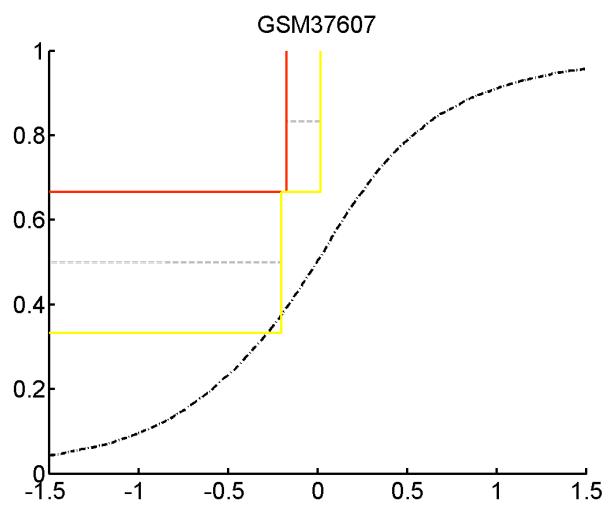
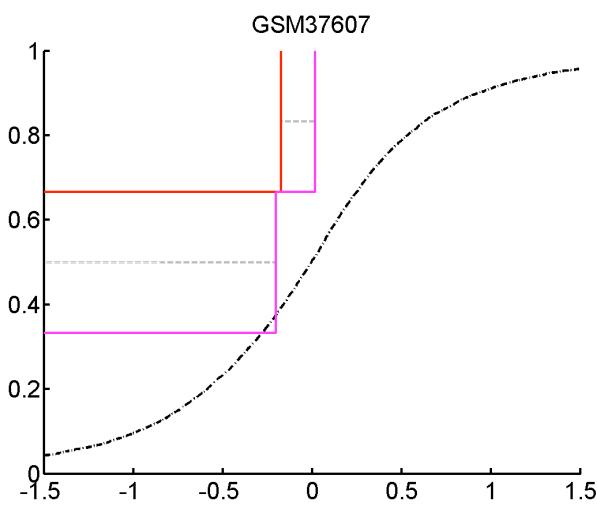
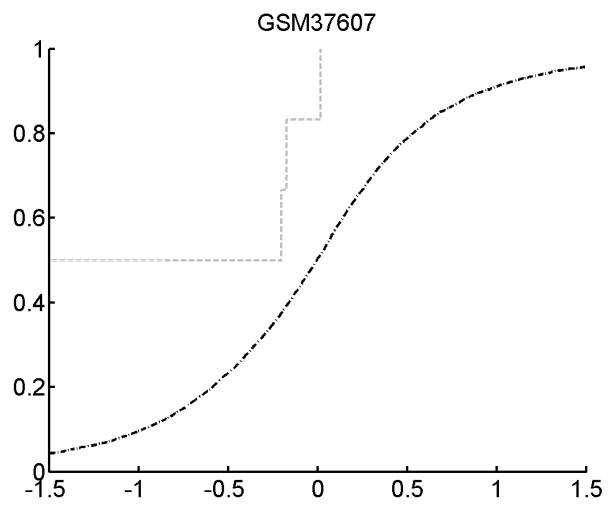
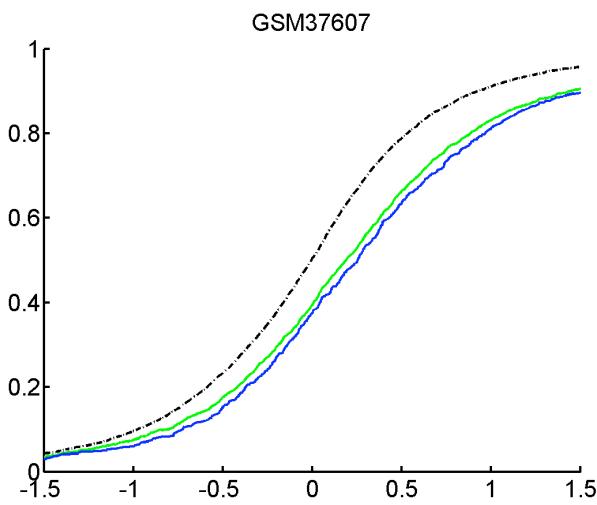
Experiment: GSM37605

mi/siRNA: chimiR-124-1



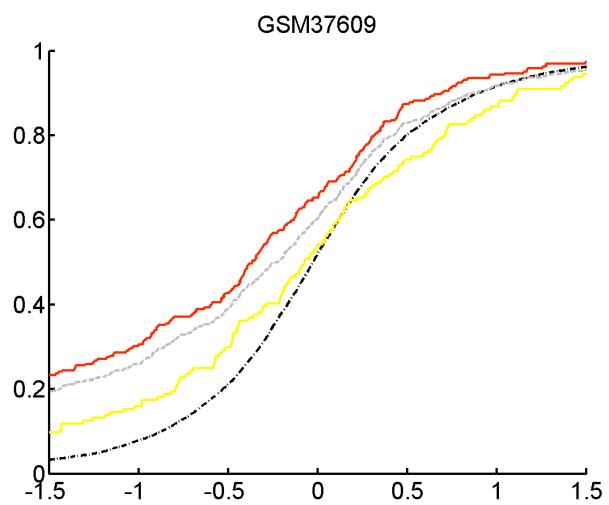
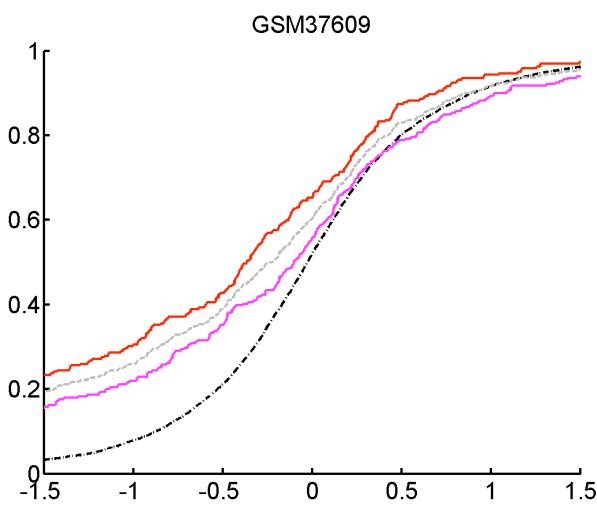
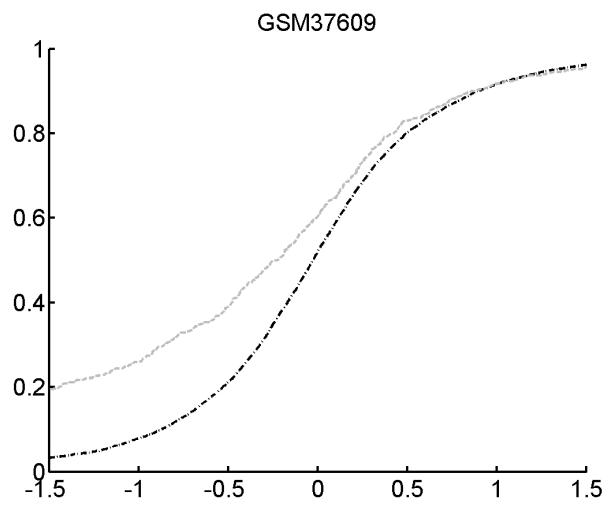
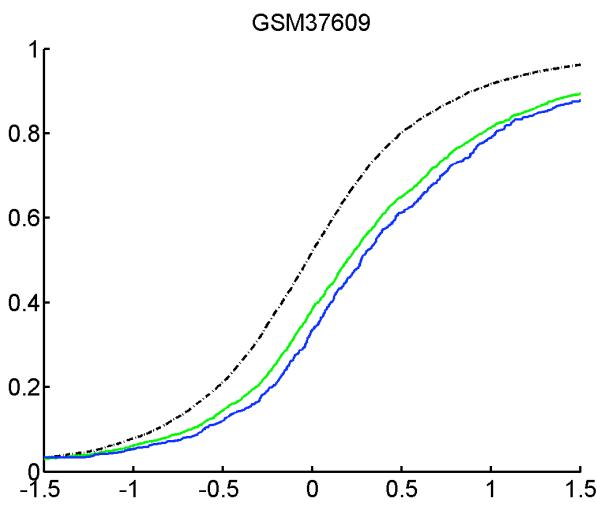
Experiment: GSM37607

mi/siRNA: miR-124mut5-6



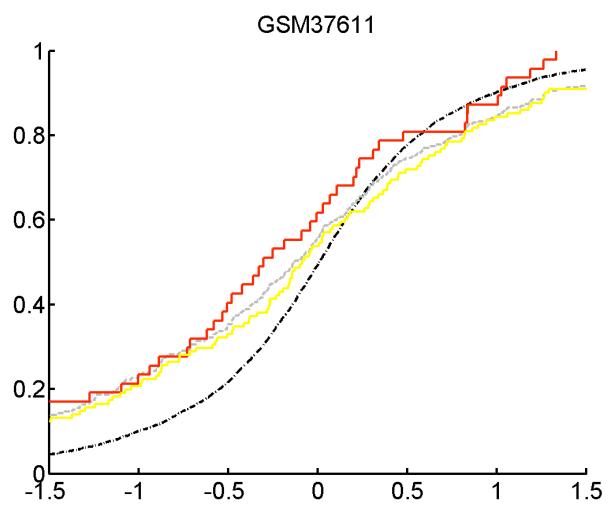
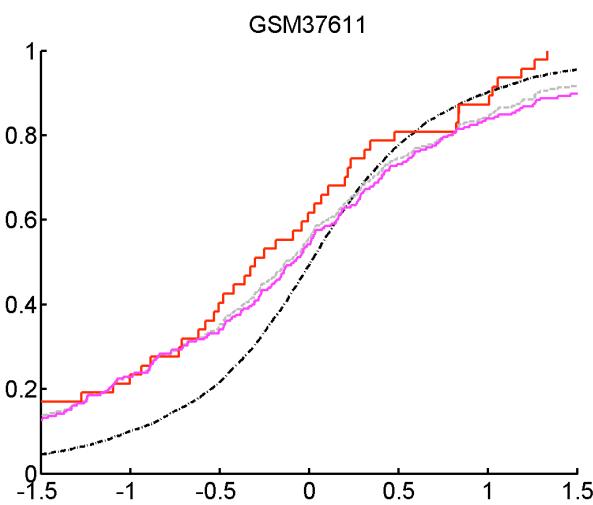
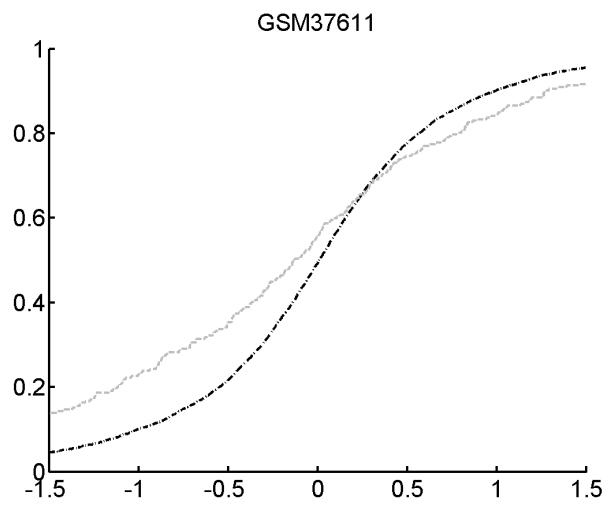
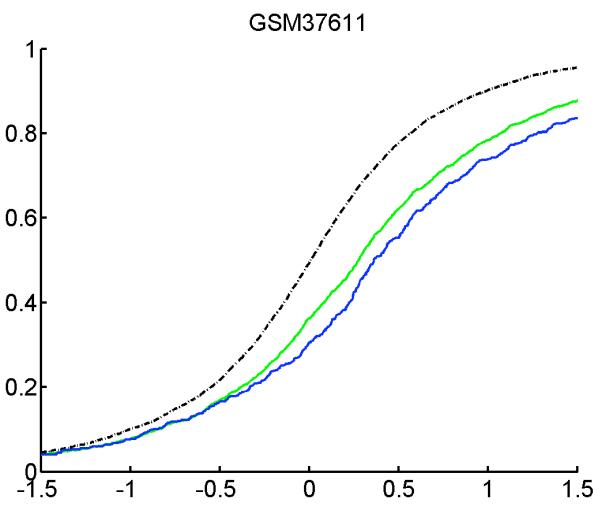
Experiment: GSM37609

mi/siRNA: miR-124mut9-10



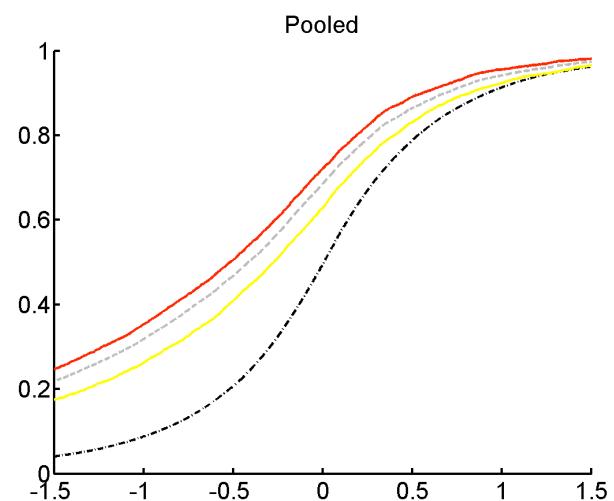
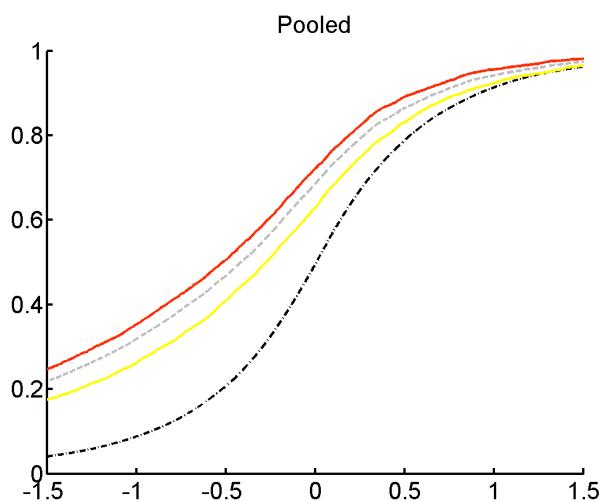
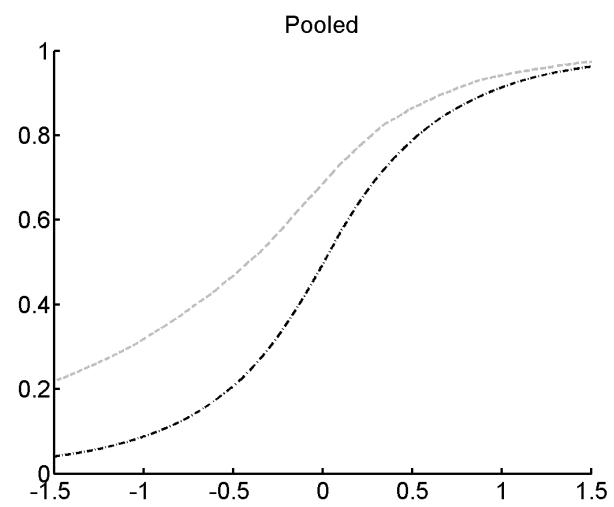
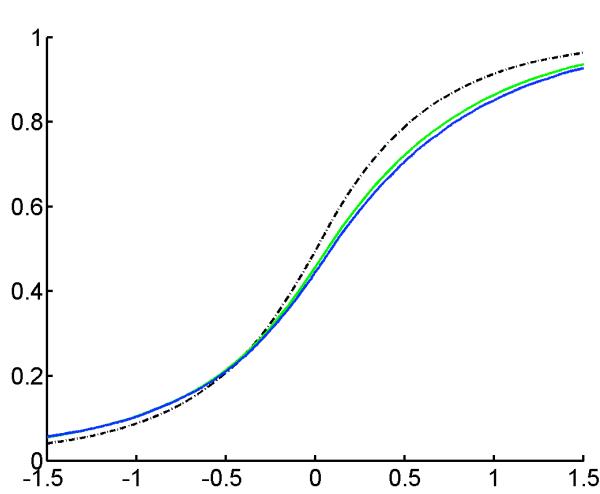
Experiment: GSM37611

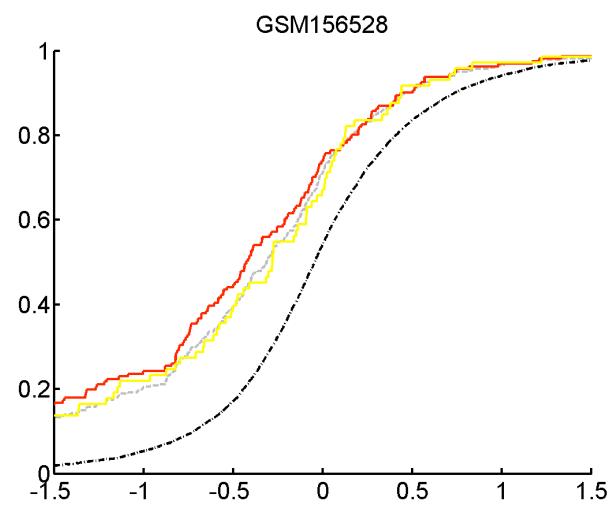
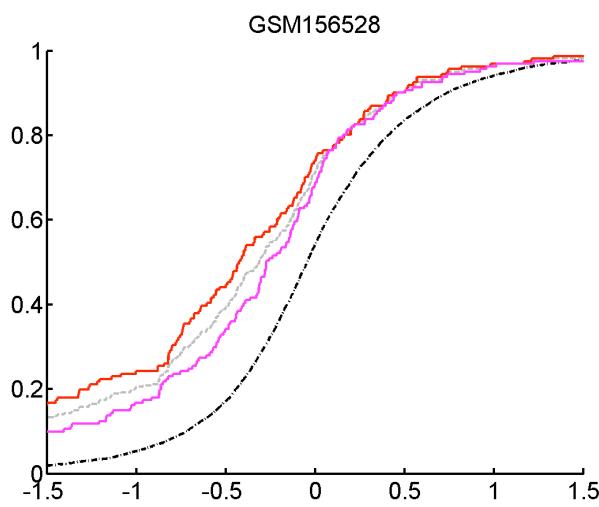
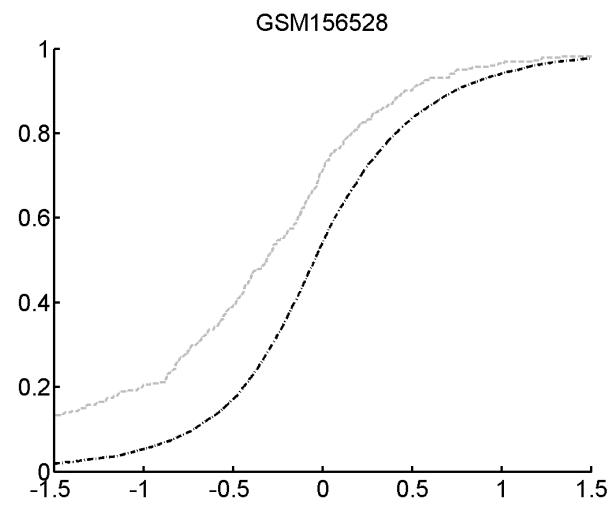
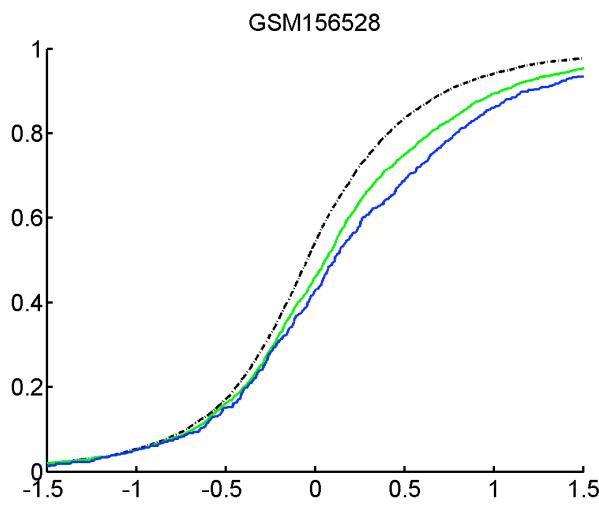
mi/siRNA: miR-373



Experiment: hela

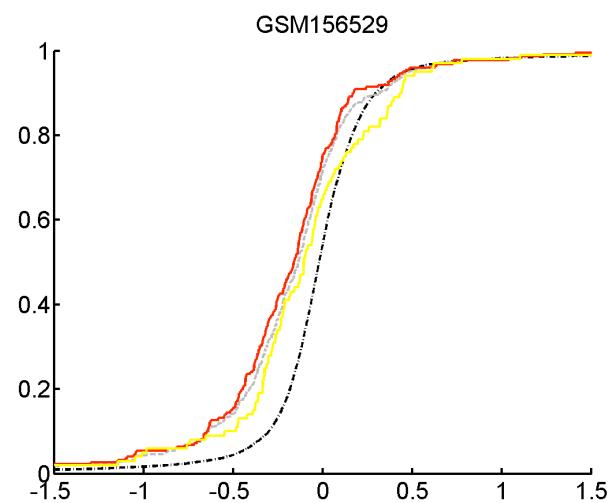
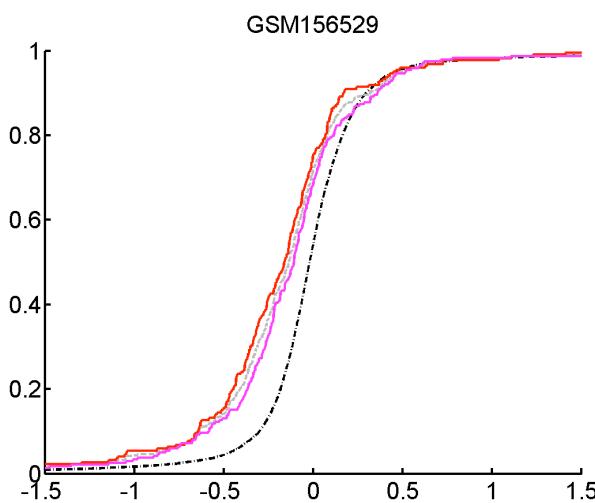
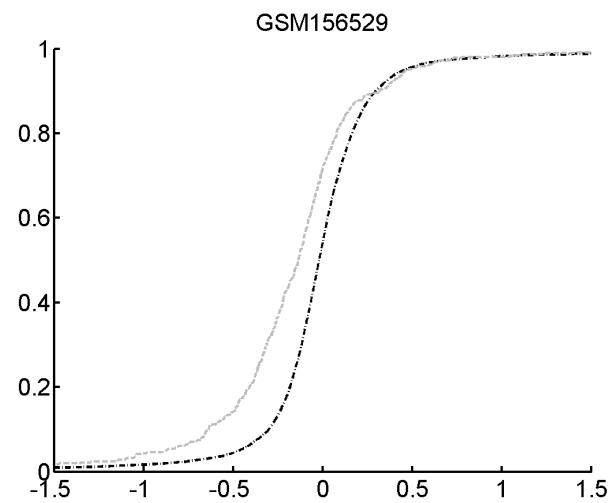
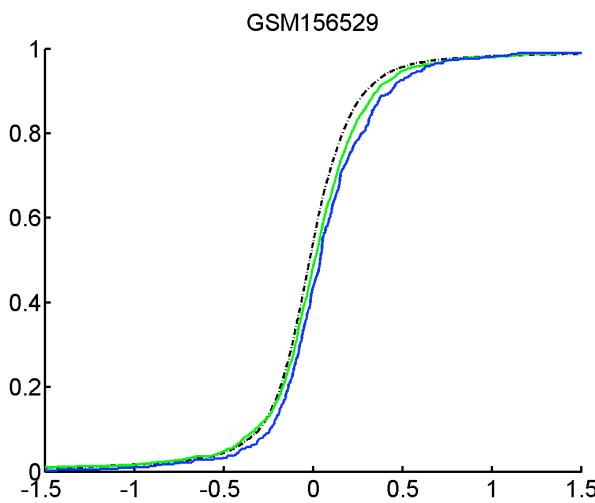
mi/siRNA: pooled

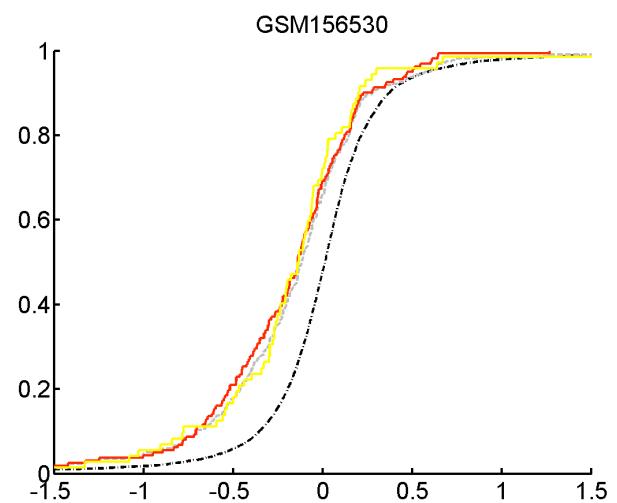
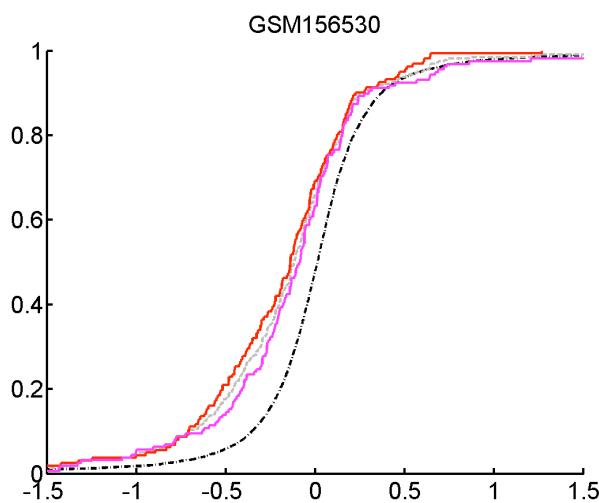
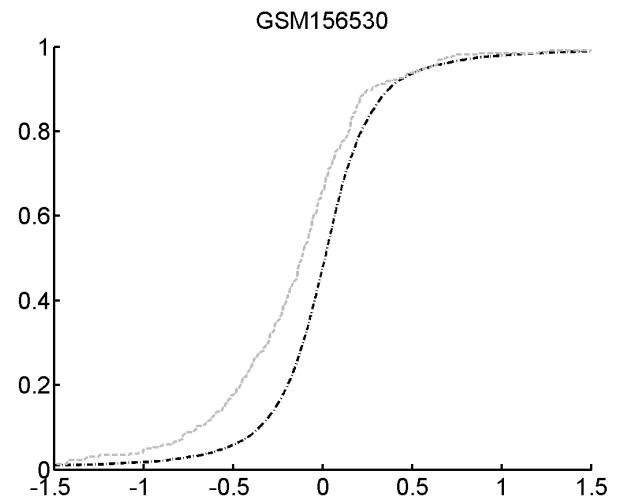
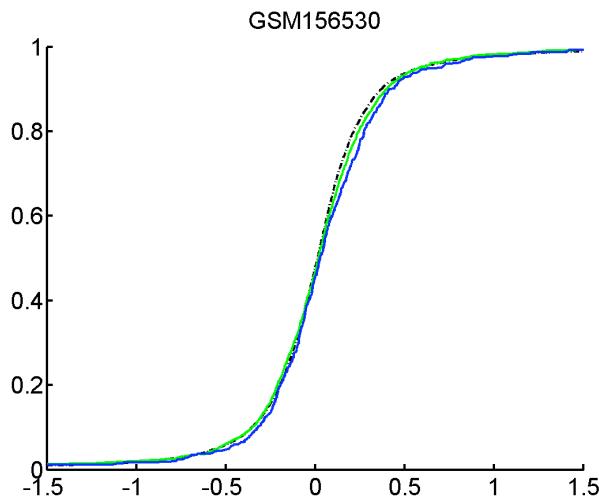




Experiment: GSM156529

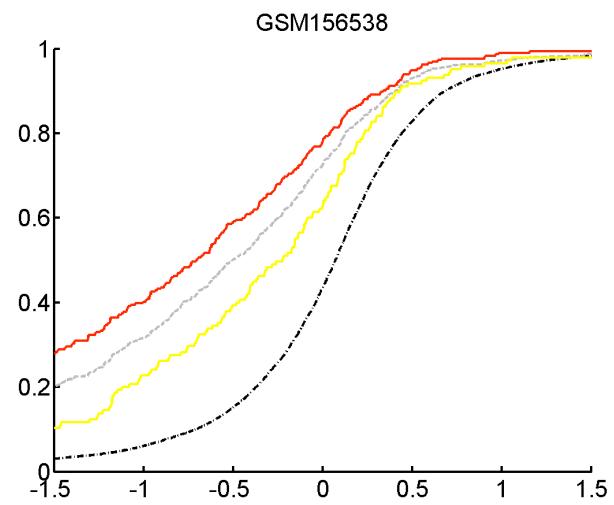
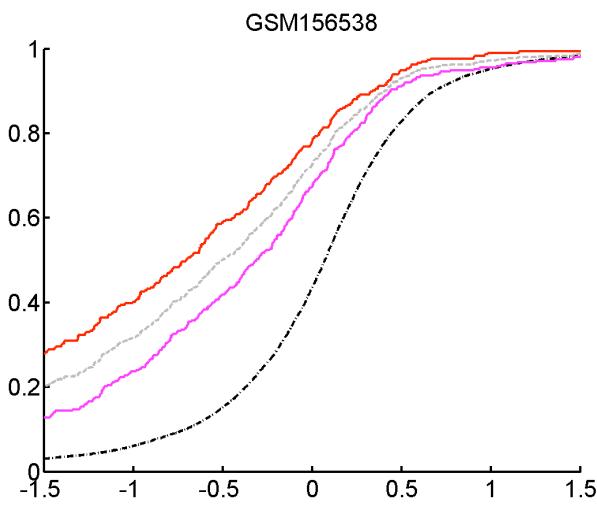
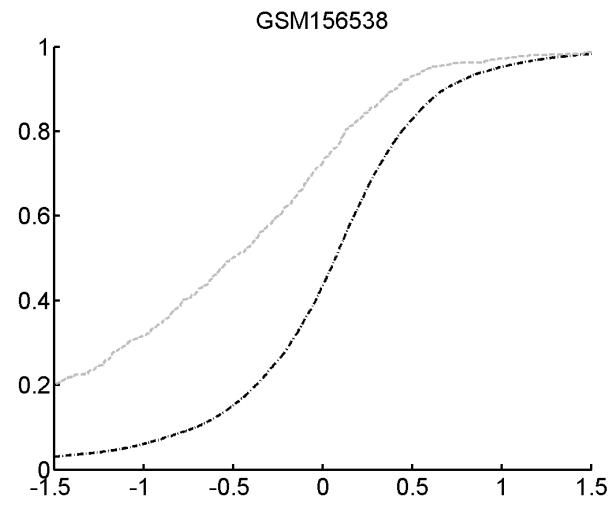
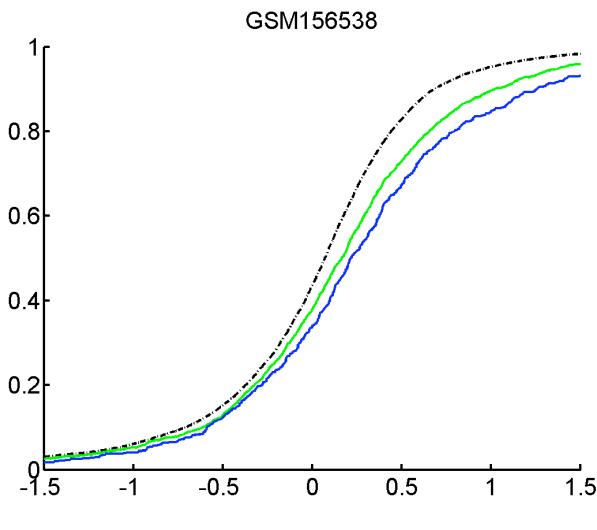
mi/siRNA: siRNA-200b





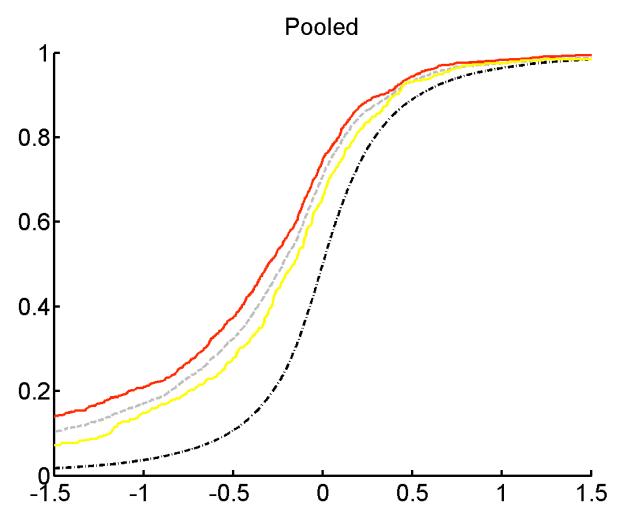
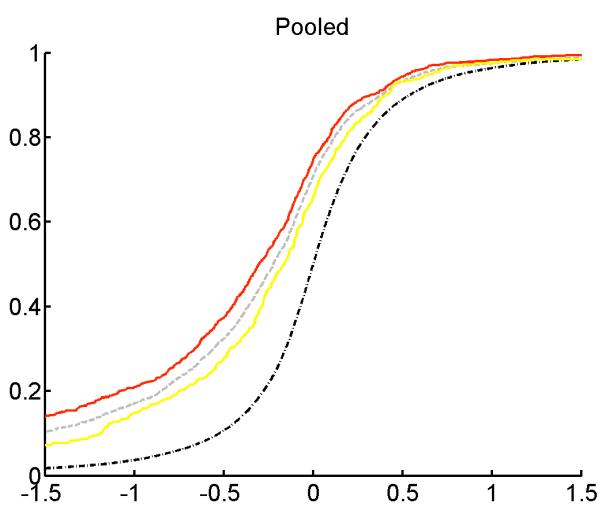
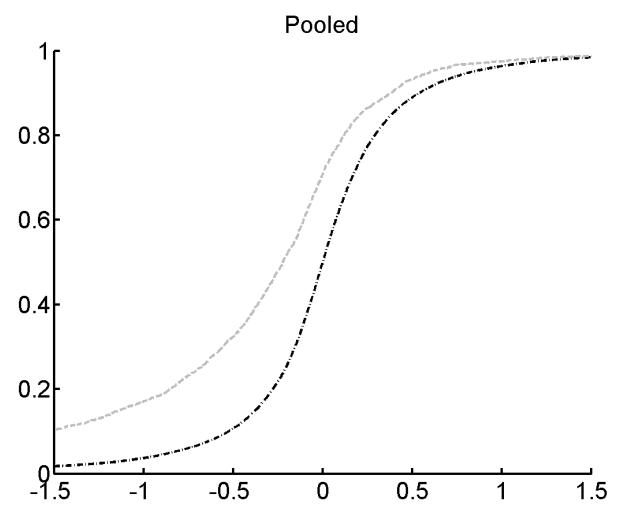
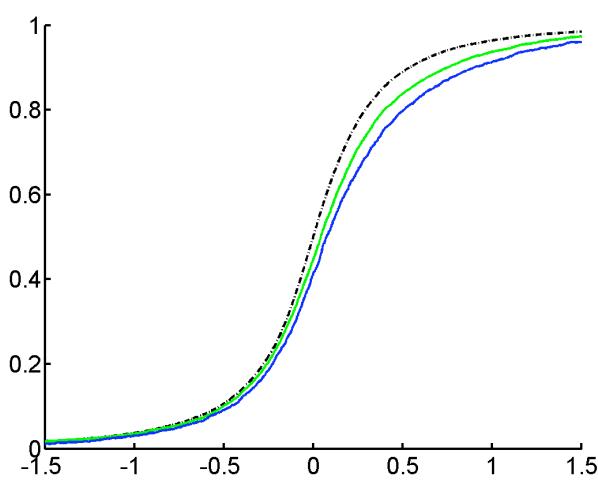
Experiment: GSM156538

mi/siRNA: miR-106b



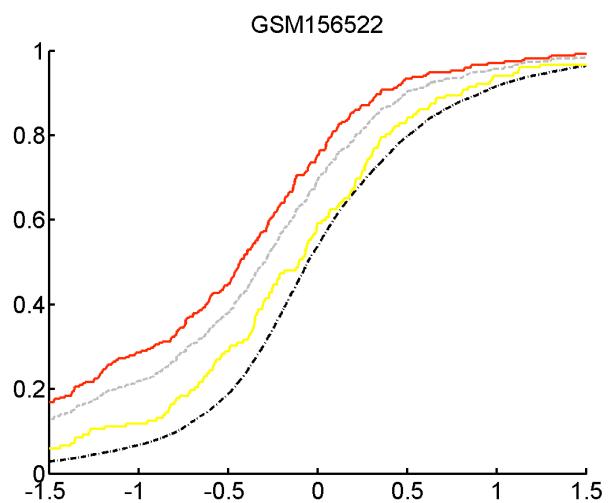
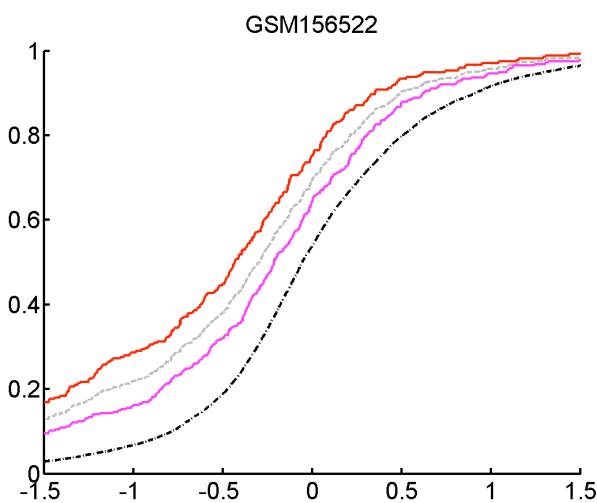
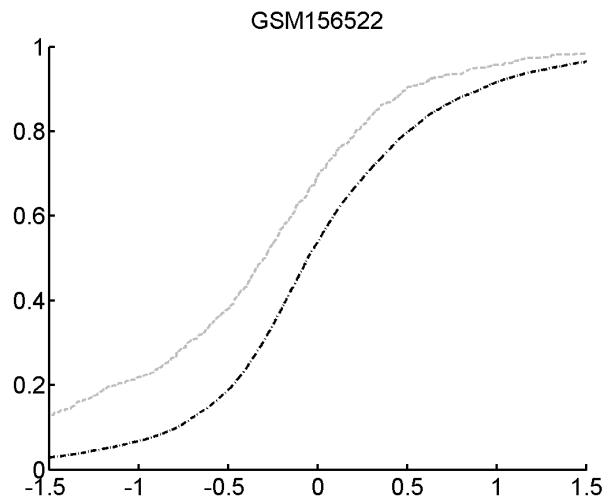
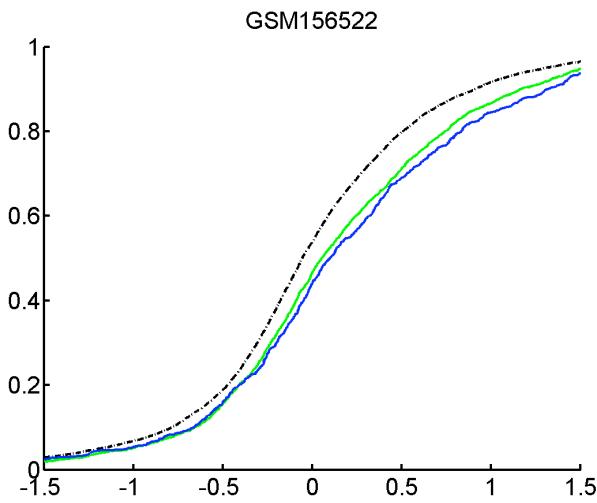
Experiment: hct116

mi/siRNA: pooled



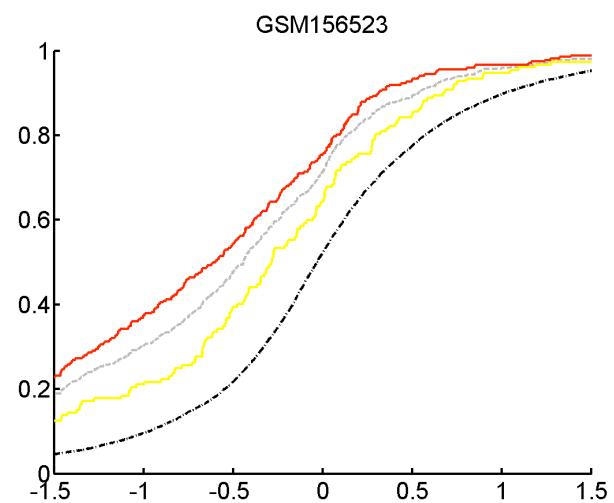
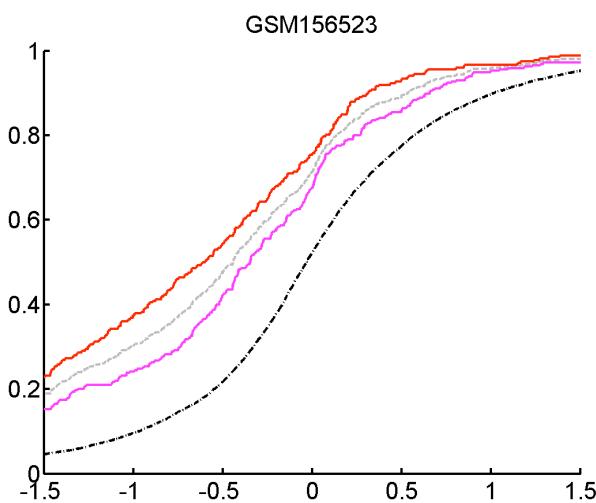
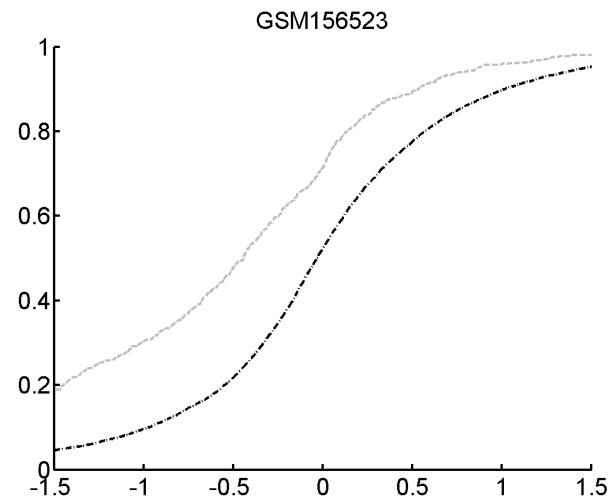
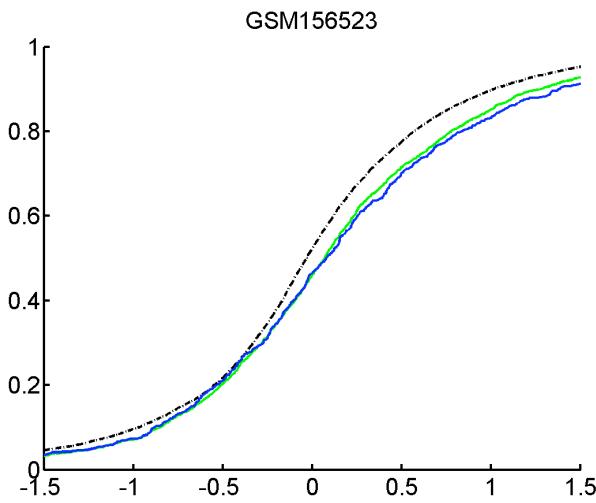
Experiment: GSM156522

mi/siRNA: miR-16



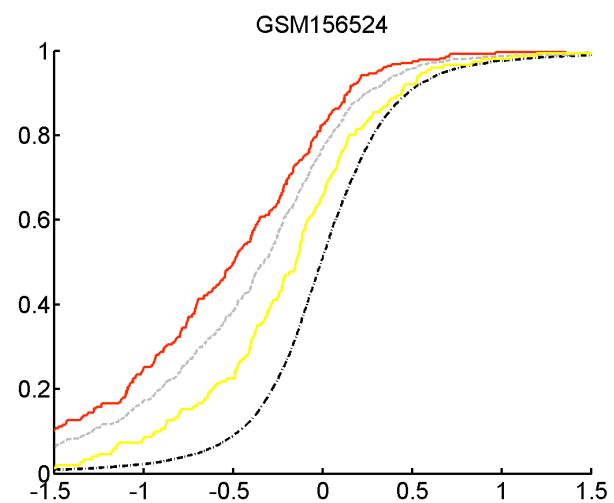
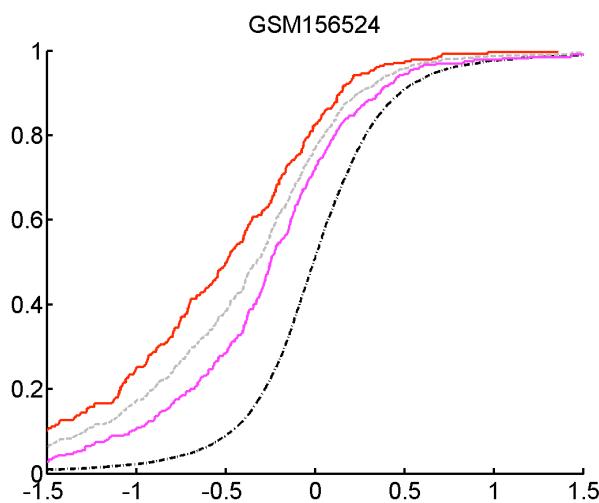
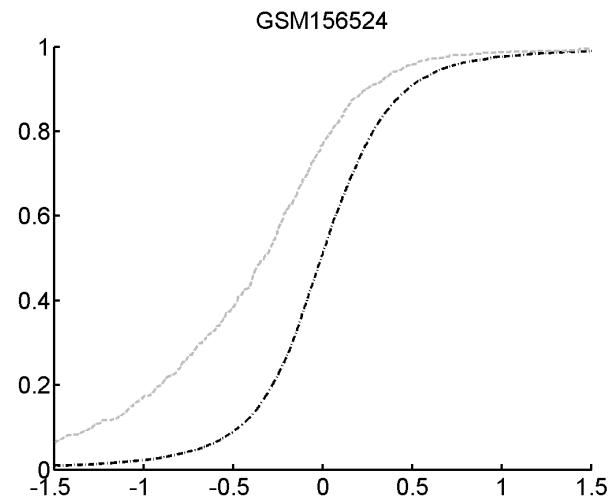
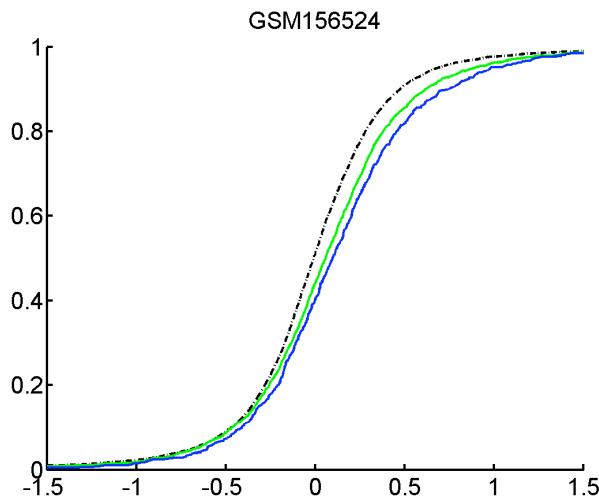
Experiment: GSM156523

mi/siRNA: miR-15a



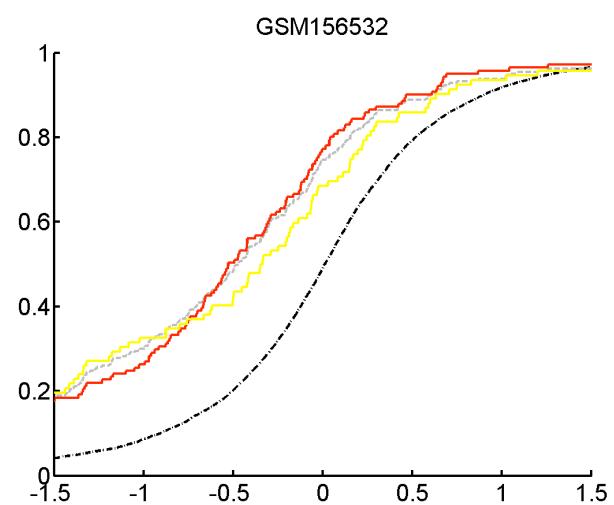
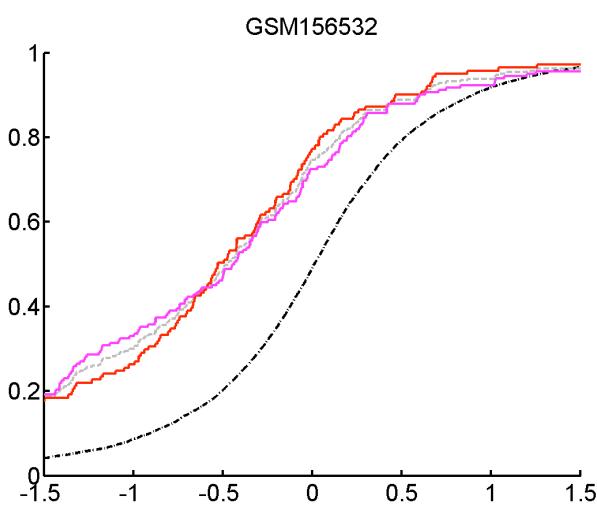
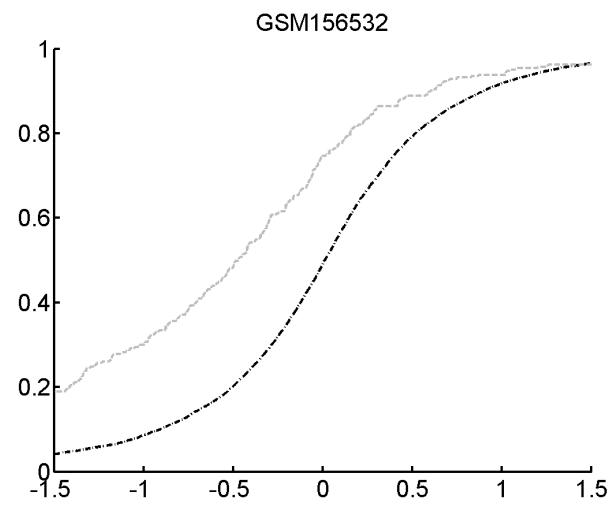
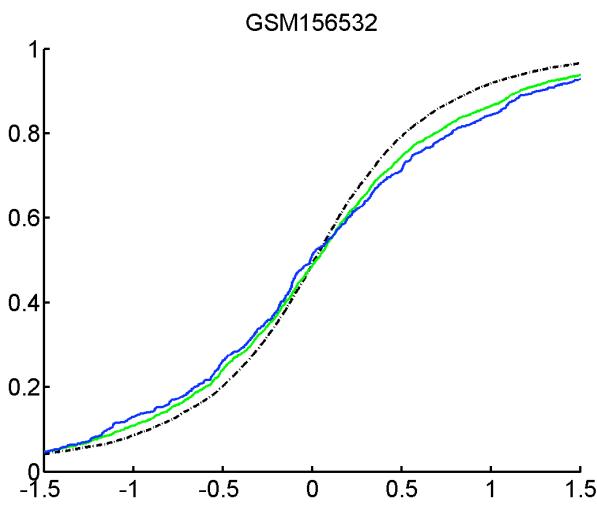
Experiment: GSM156524

mi/siRNA: miR-106b



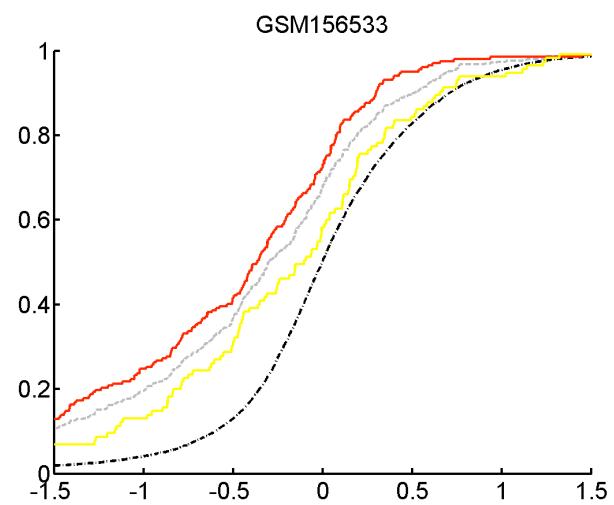
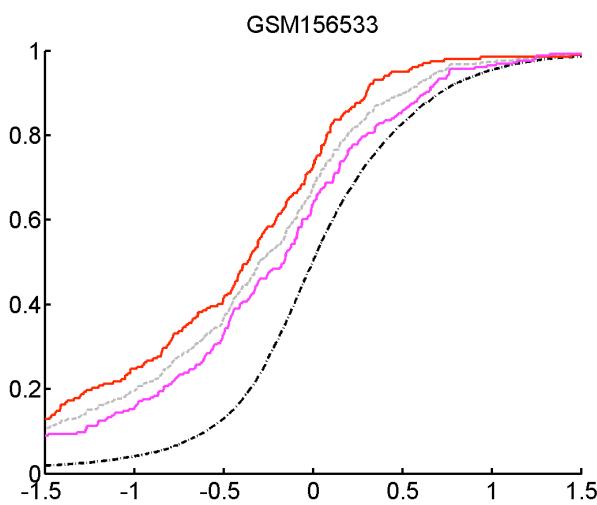
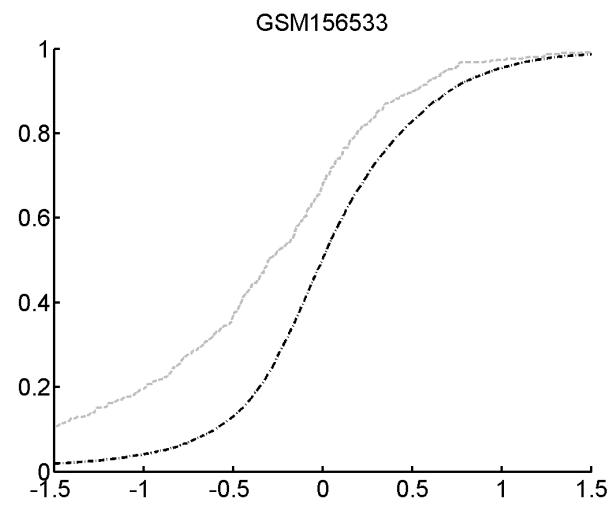
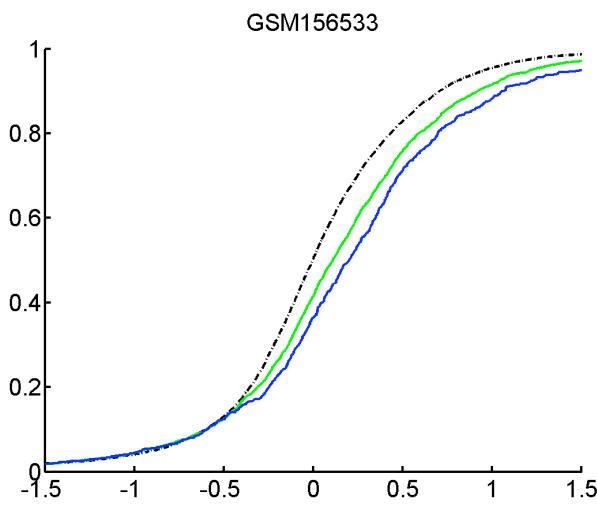
Experiment: GSM156532

mi/siRNA: siRNA-200a



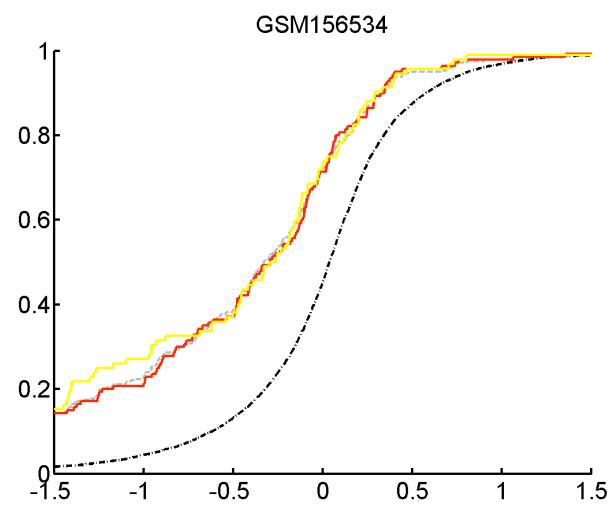
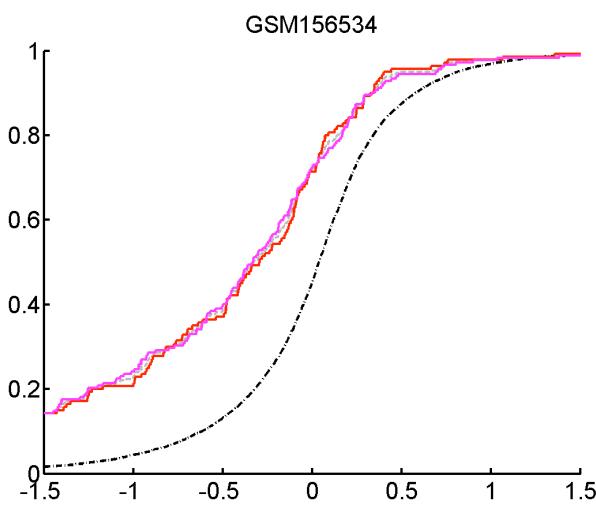
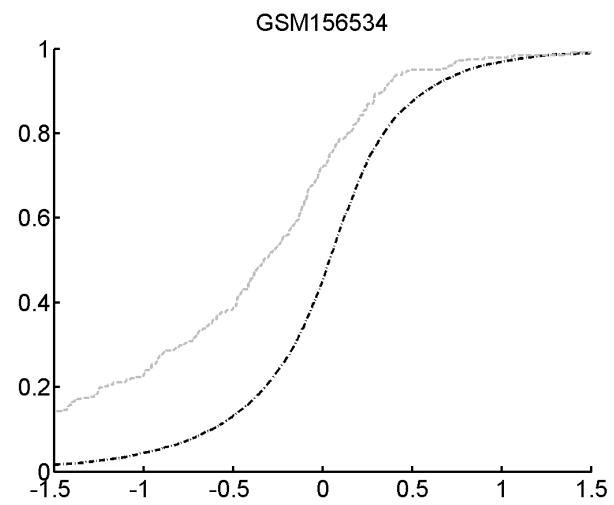
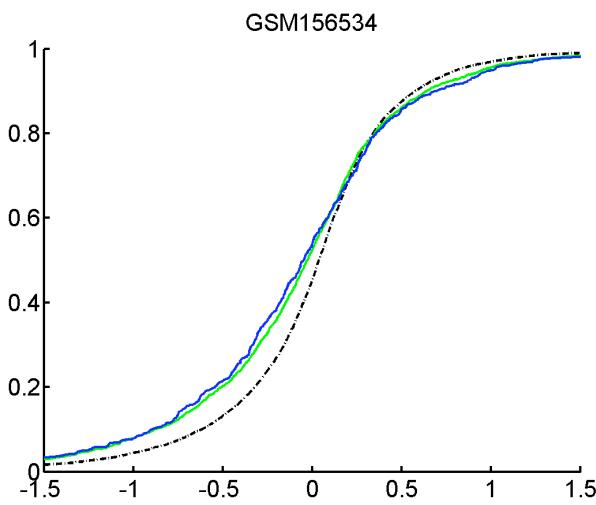
Experiment: GSM156533

mi/siRNA: siRNA-200b



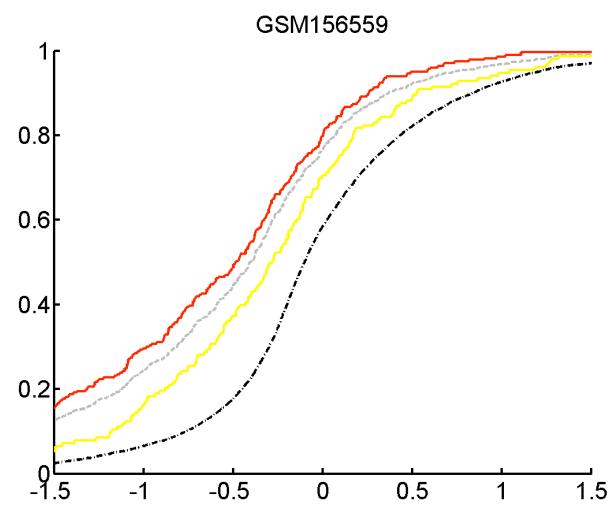
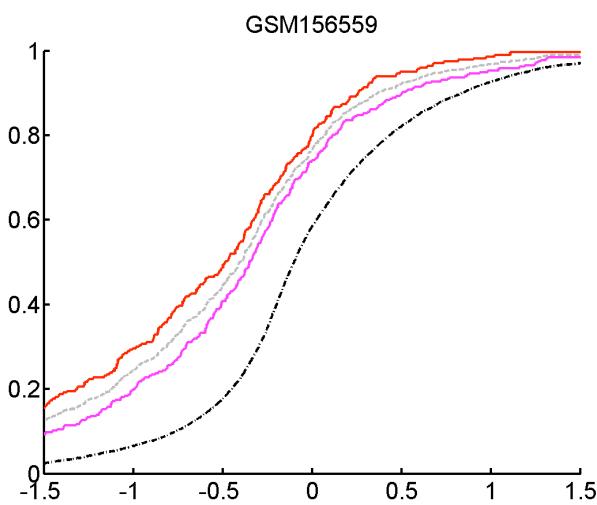
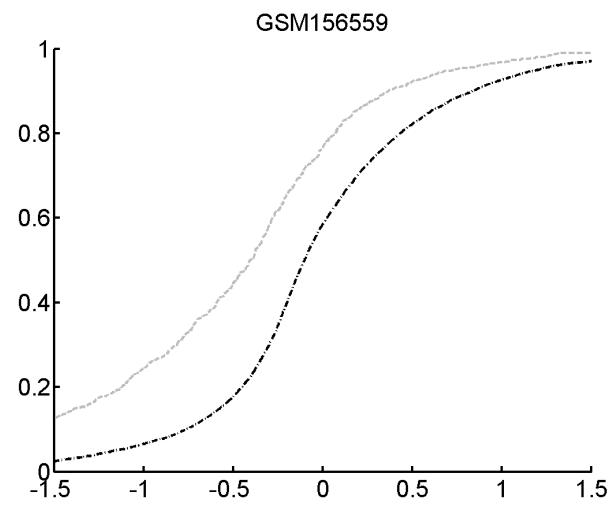
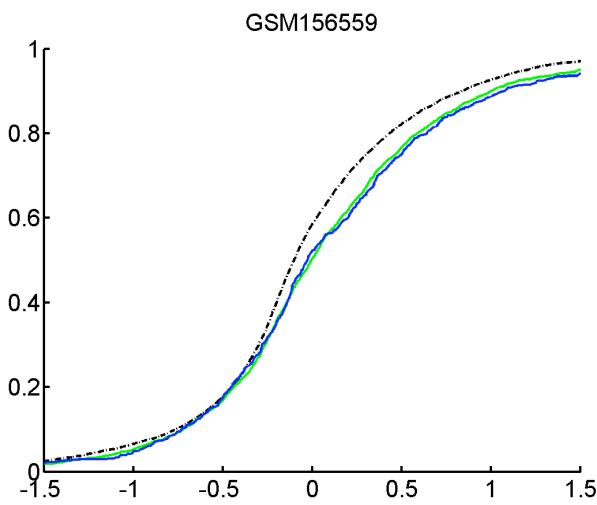
Experiment: GSM156534

mi/siRNA: siRNA-141



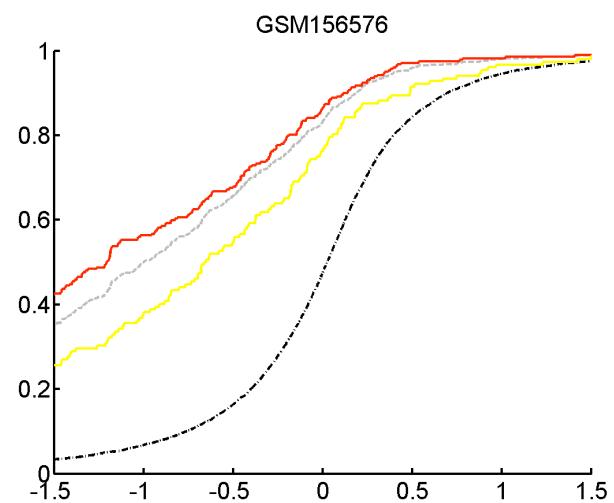
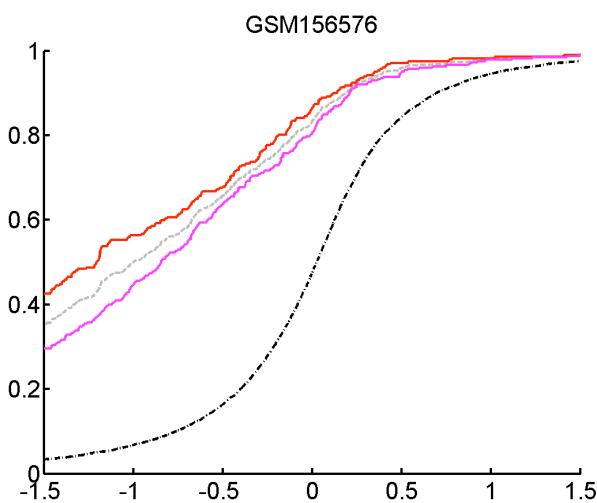
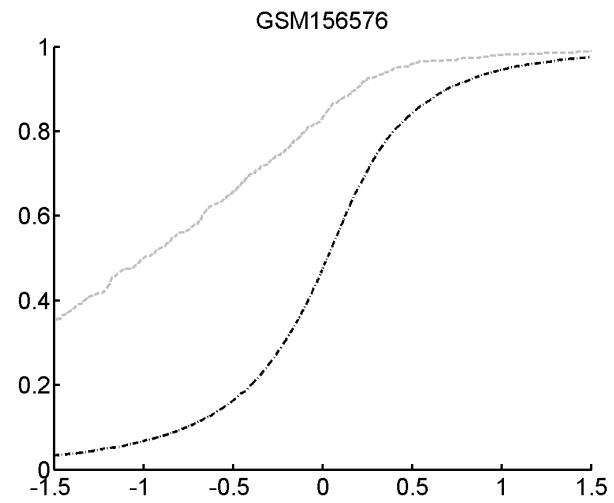
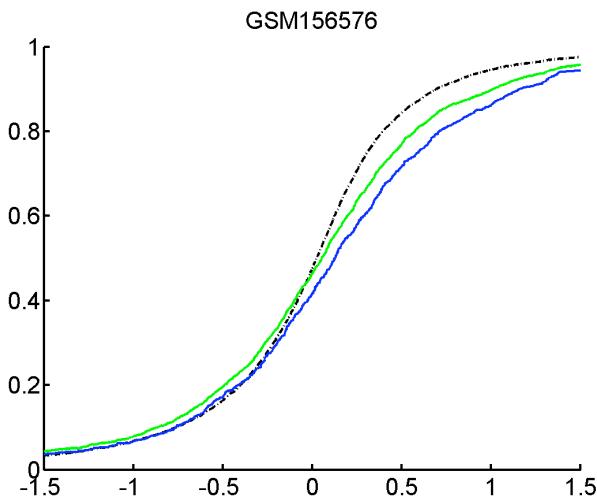
Experiment: GSM156559

mi/siRNA: miR-195



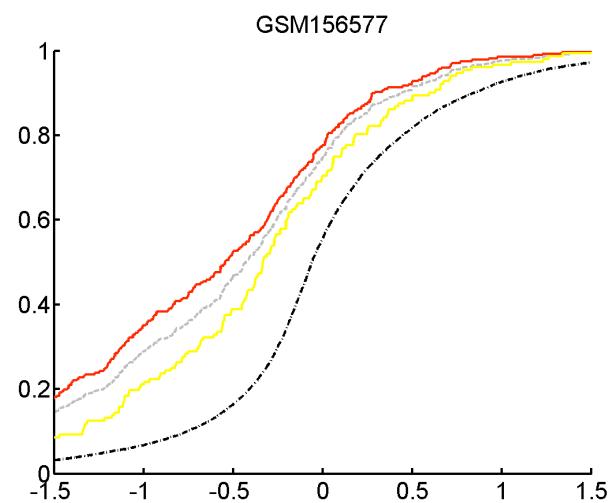
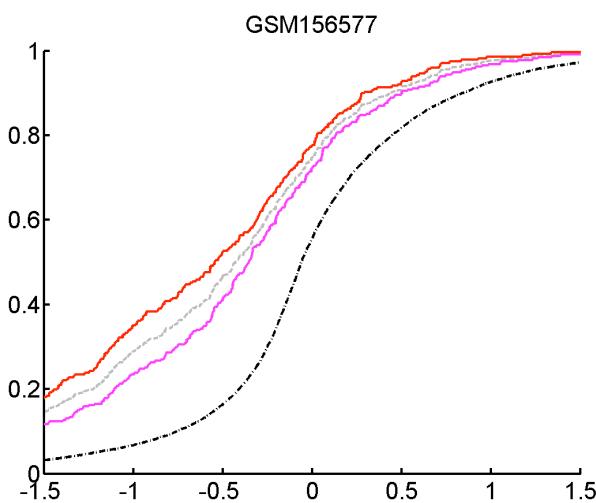
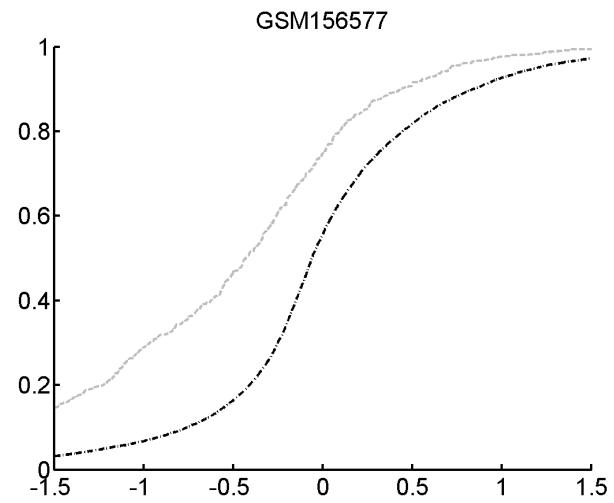
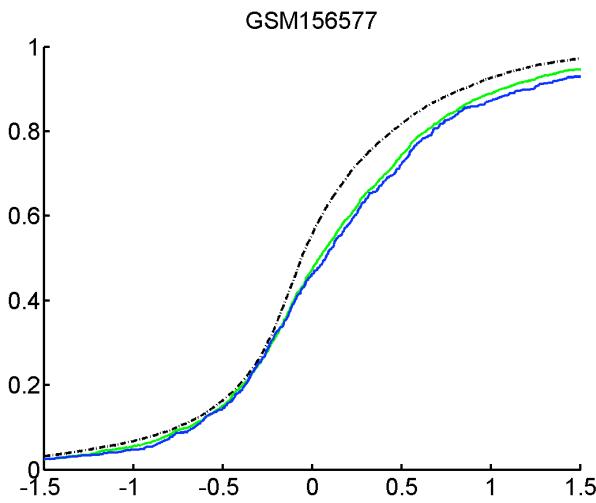
Experiment: GSM156576

mi/siRNA: miR-106b



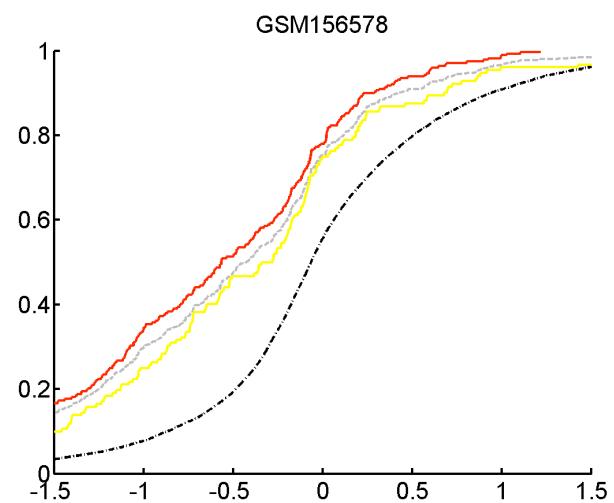
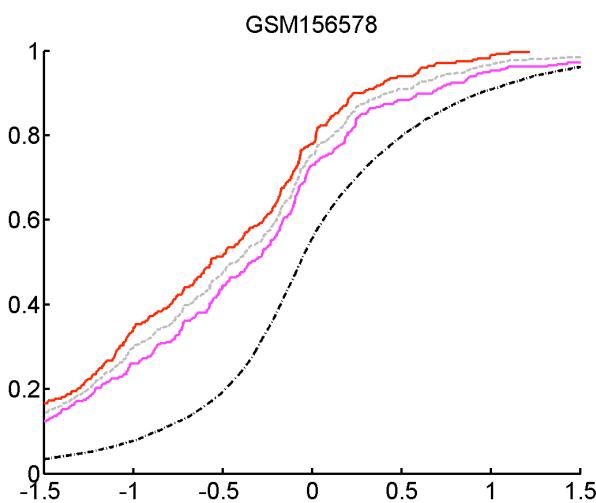
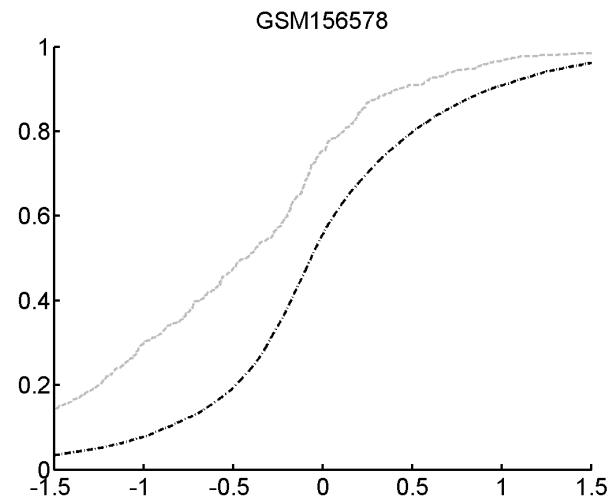
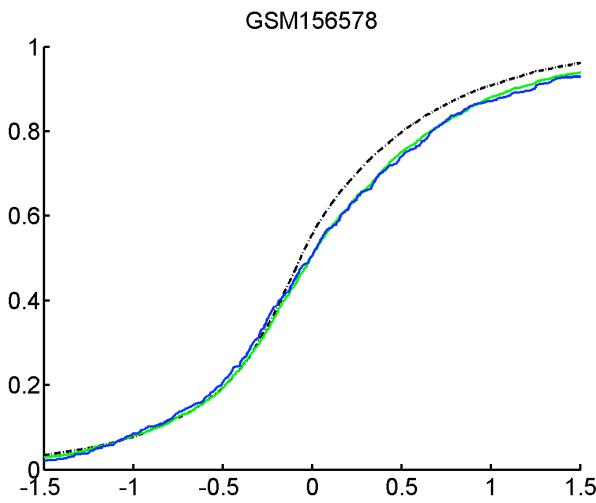
Experiment: GSM156577

mi/siRNA: miR-15a



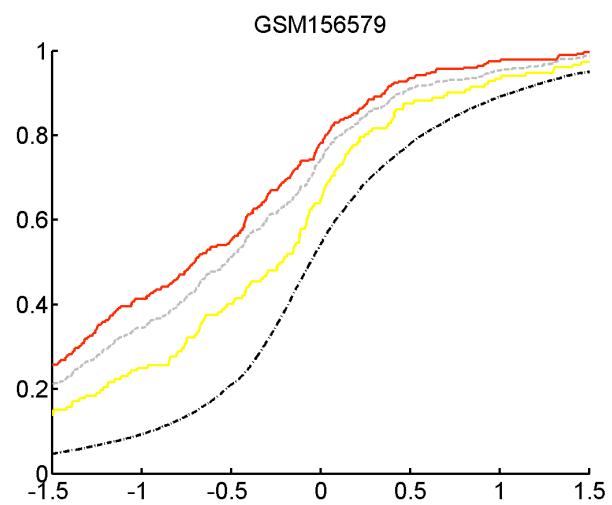
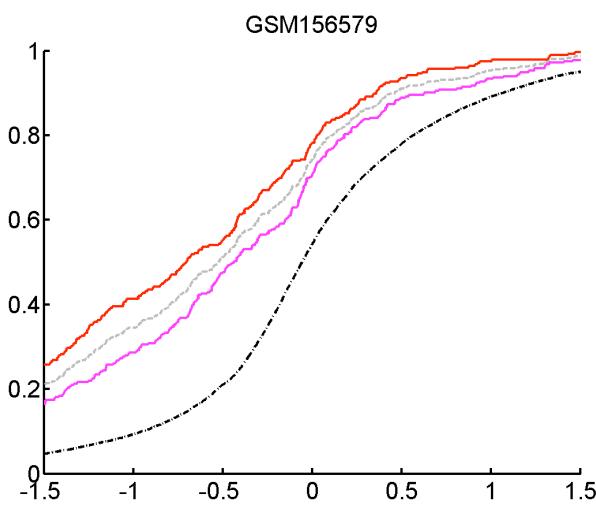
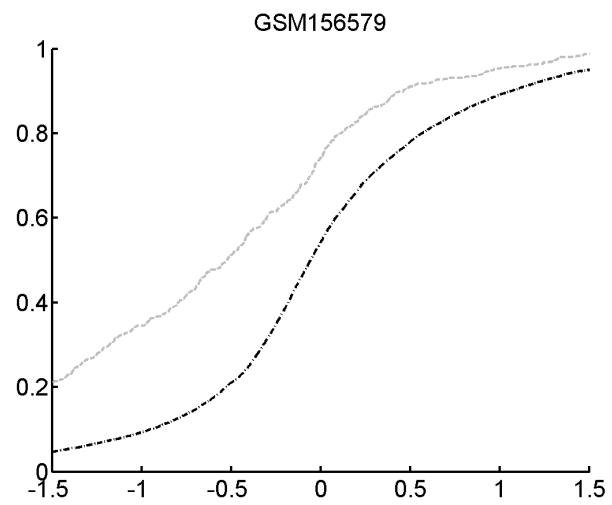
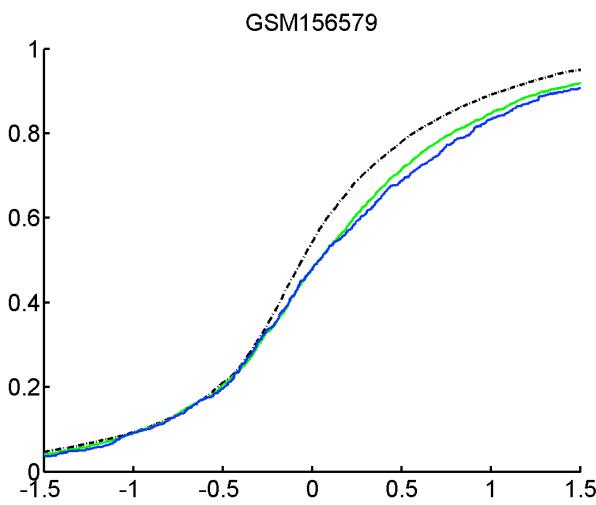
Experiment: GSM156578

mi/siRNA: miR-15b



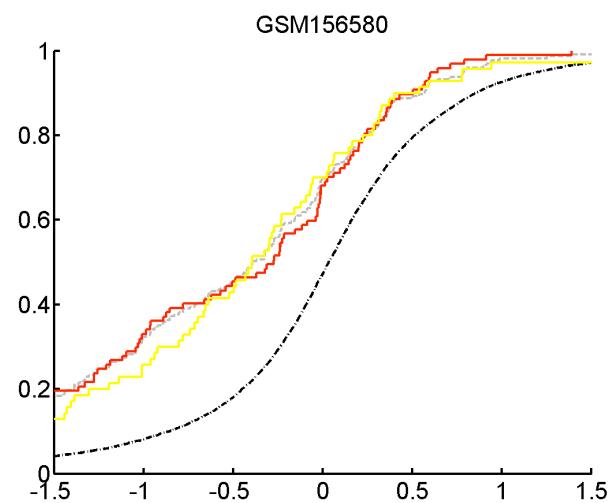
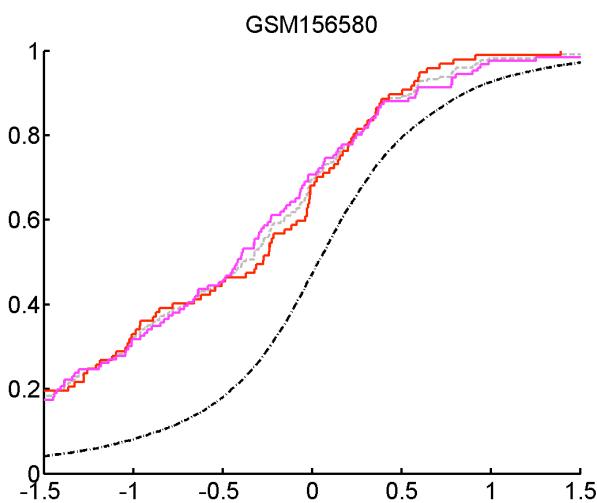
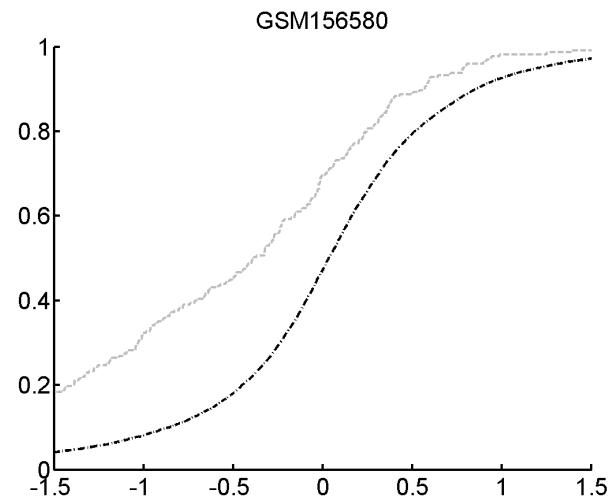
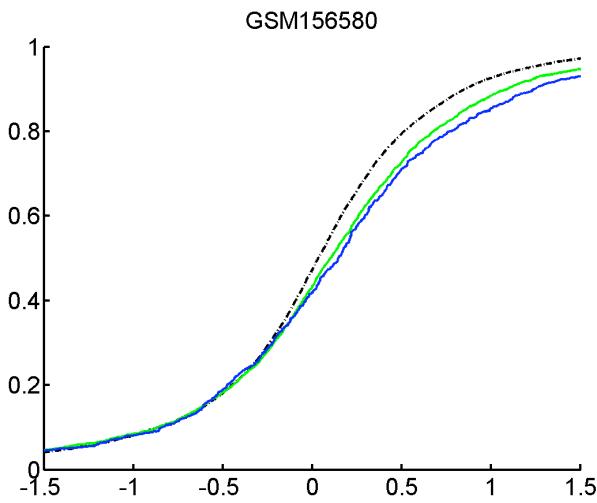
Experiment: GSM156579

mi/siRNA: miR-16



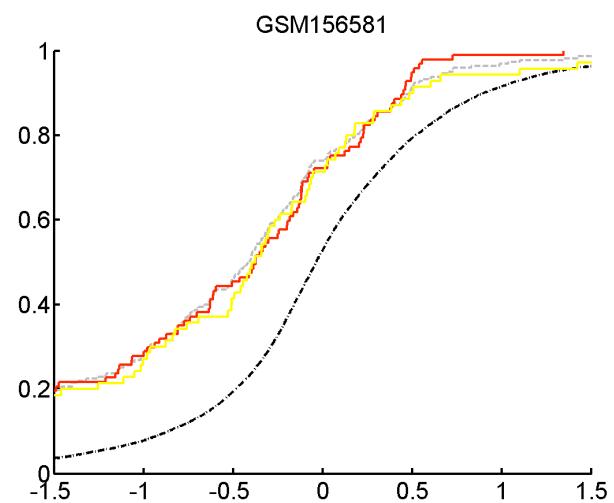
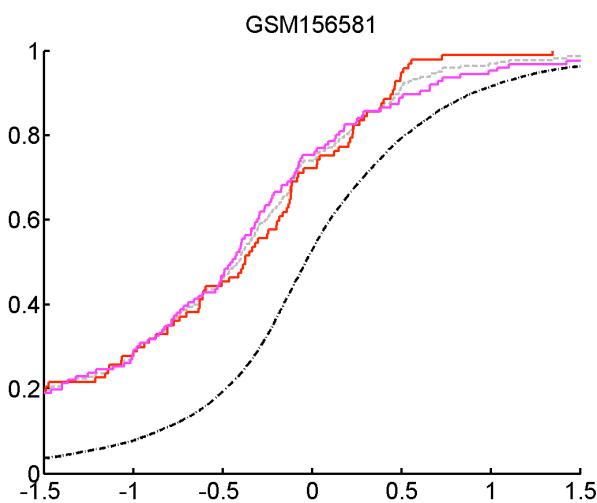
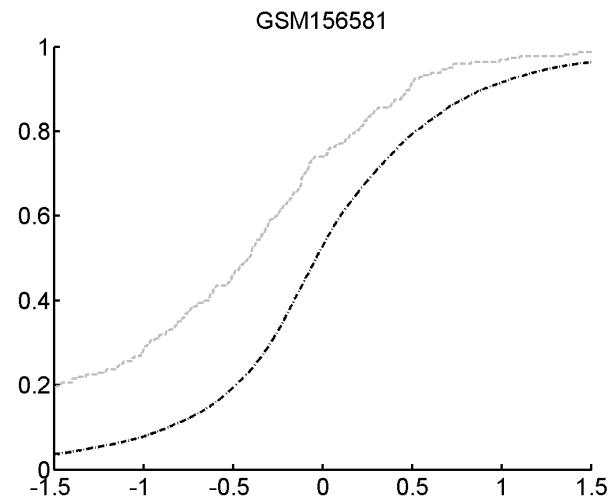
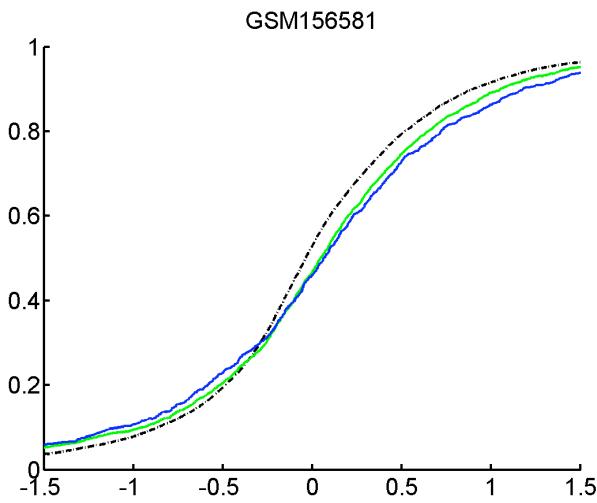
Experiment: GSM156580

mi/siRNA: miR-103



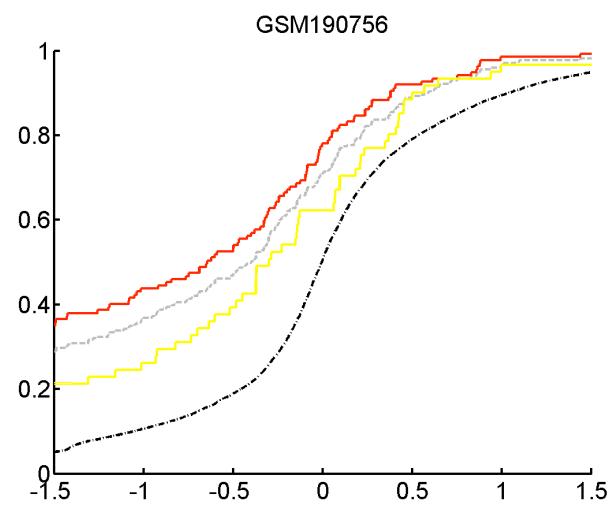
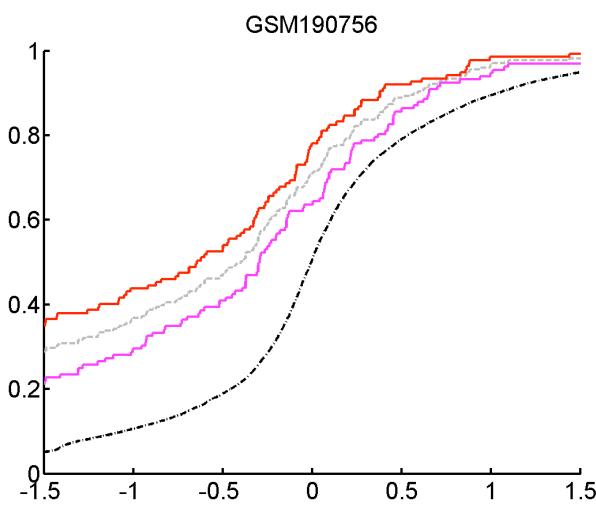
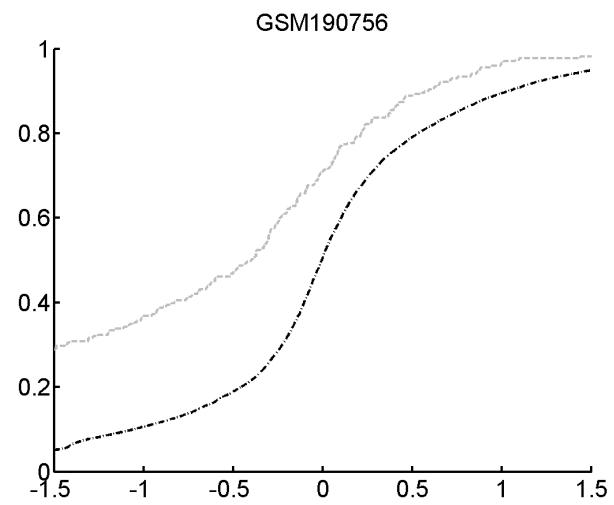
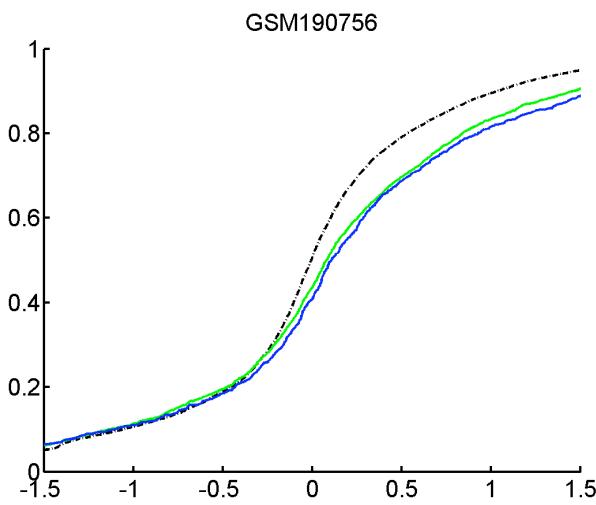
Experiment: GSM156581

mi/siRNA: miR-107



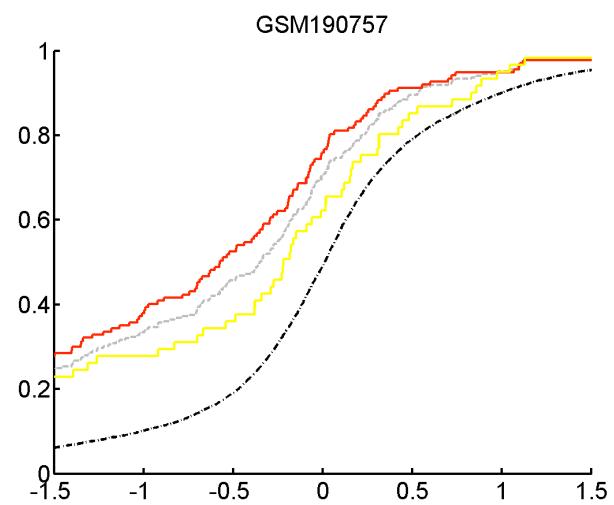
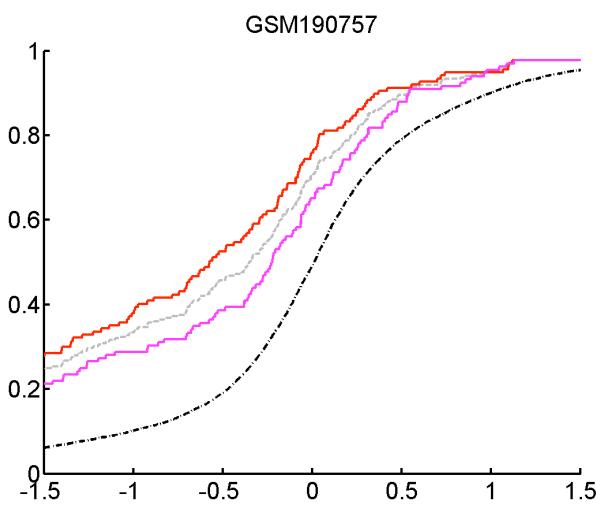
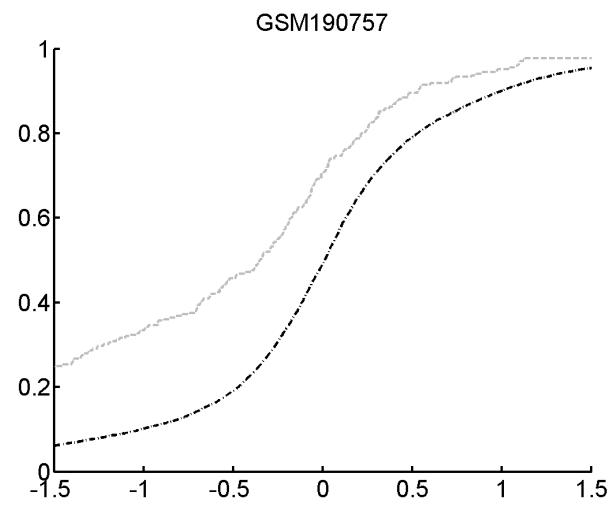
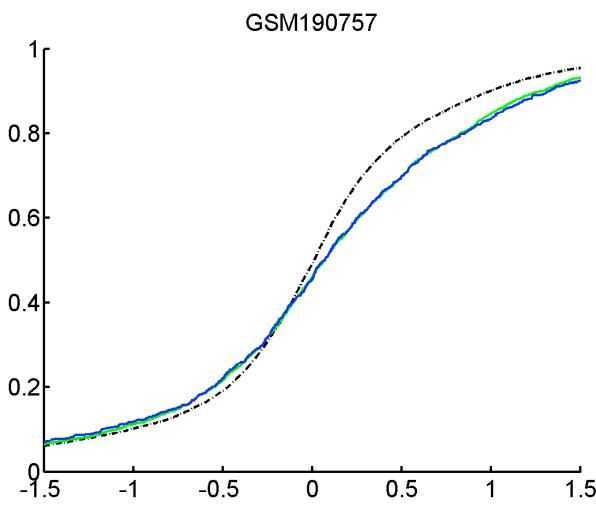
Experiment: GSM190756

mi/siRNA: miR-34a



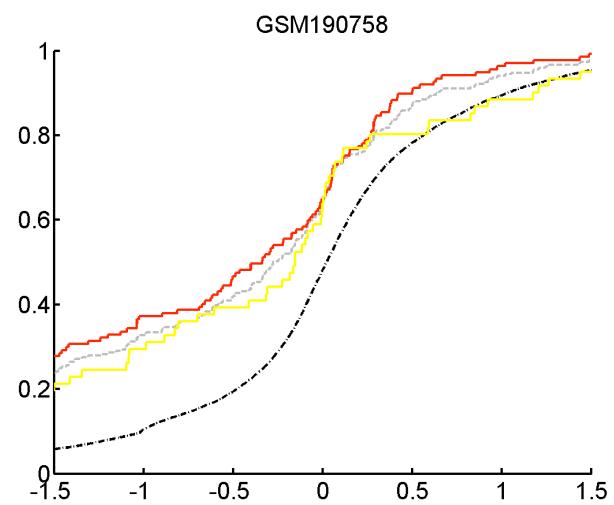
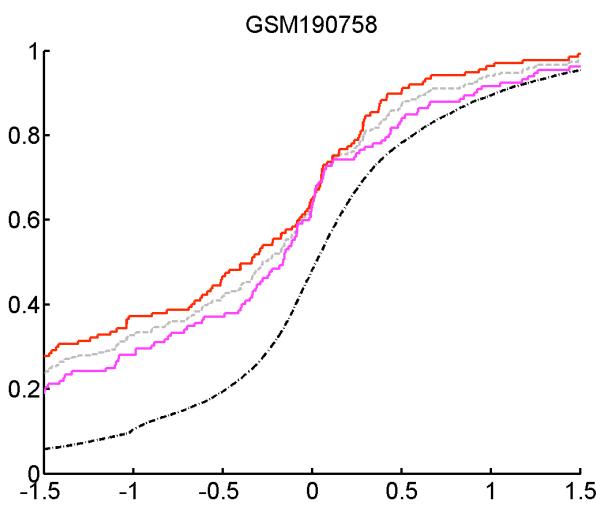
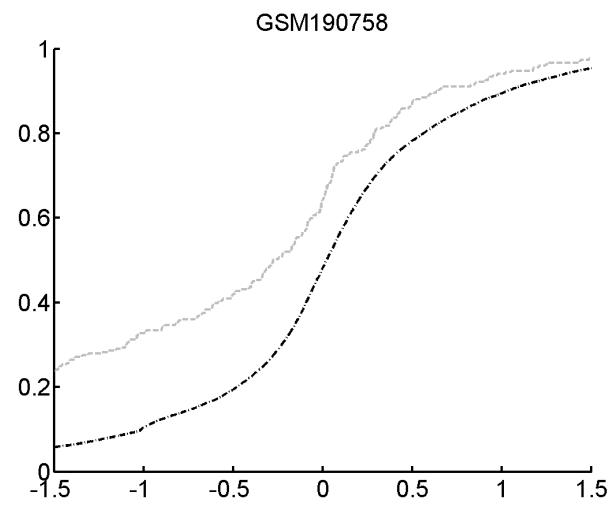
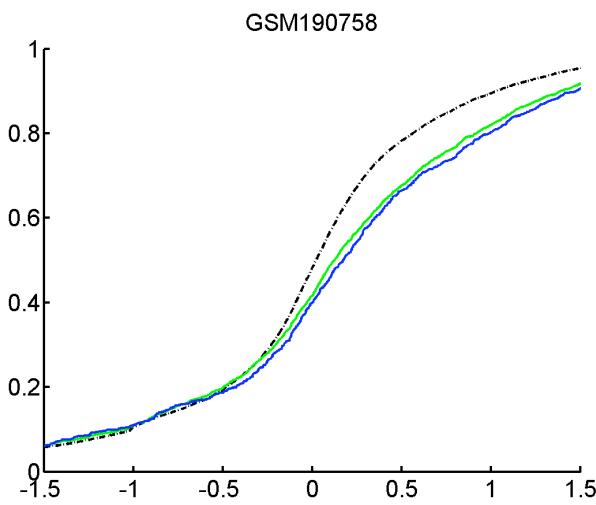
Experiment: GSM190757

mi/siRNA: miR-34b



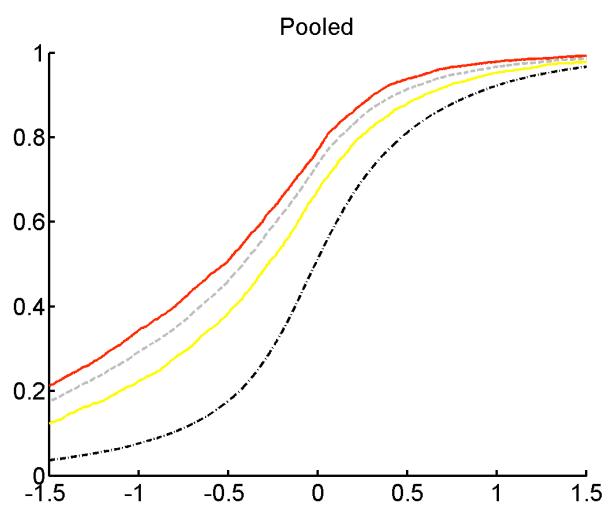
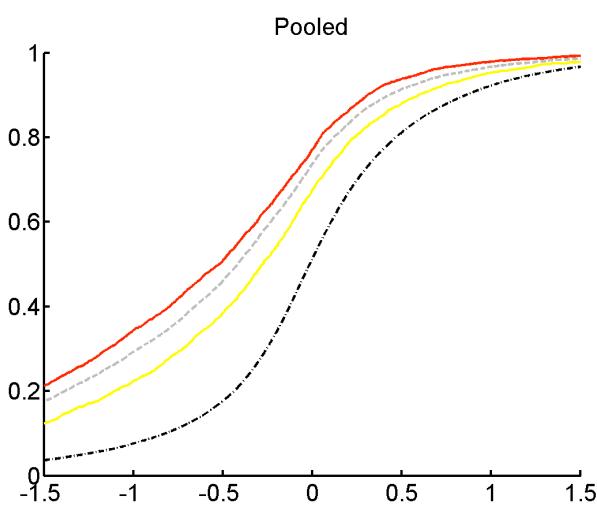
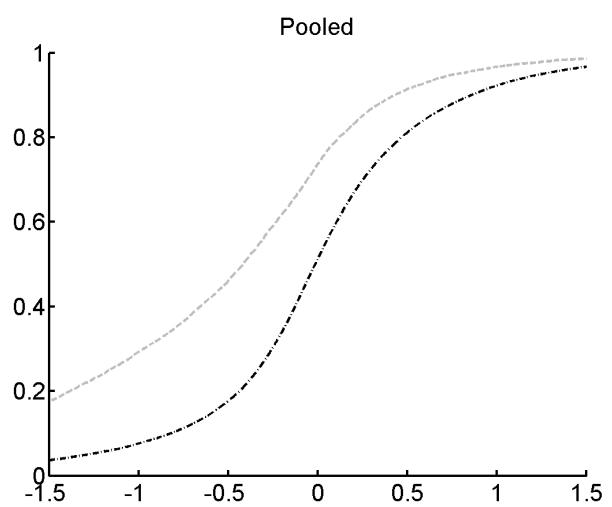
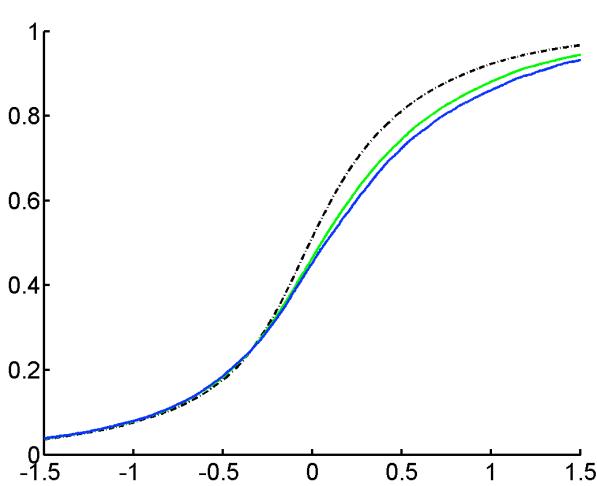
Experiment: GSM190758

mi/siRNA: miR-34c



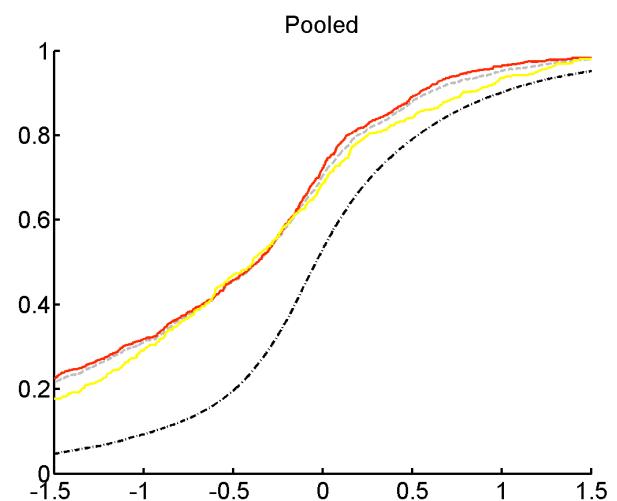
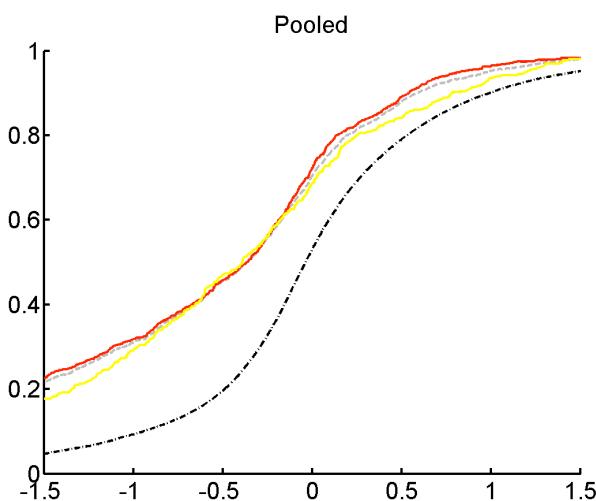
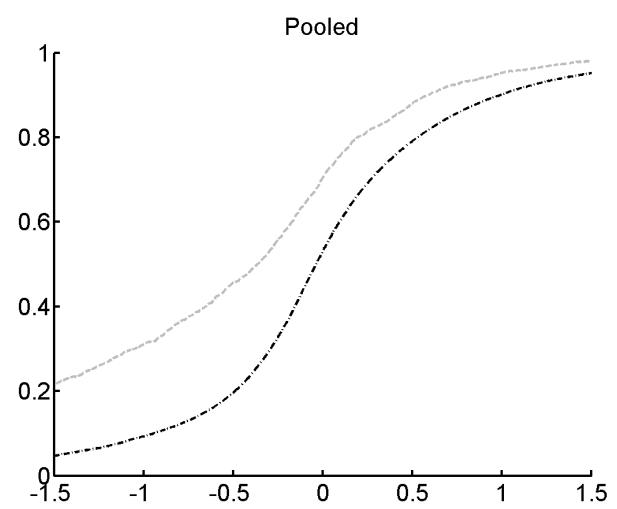
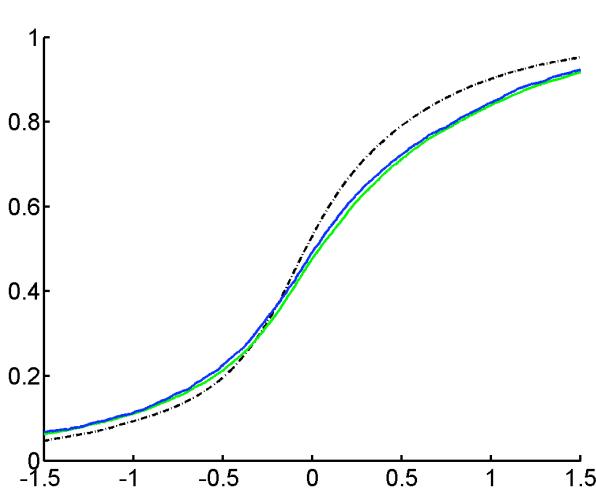
Experiment: hct116-dko

mi/siRNA: pooled



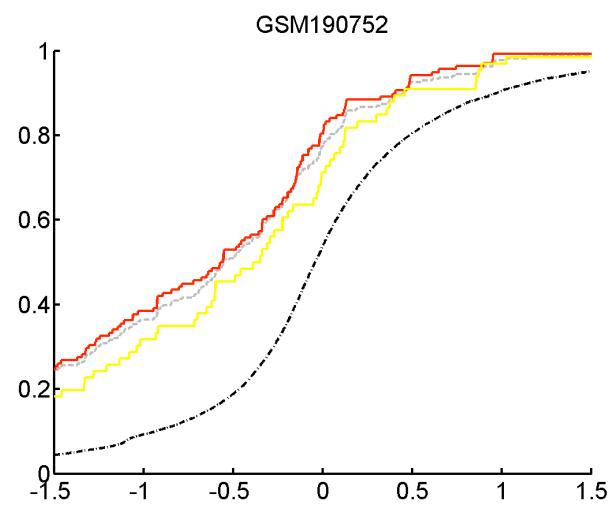
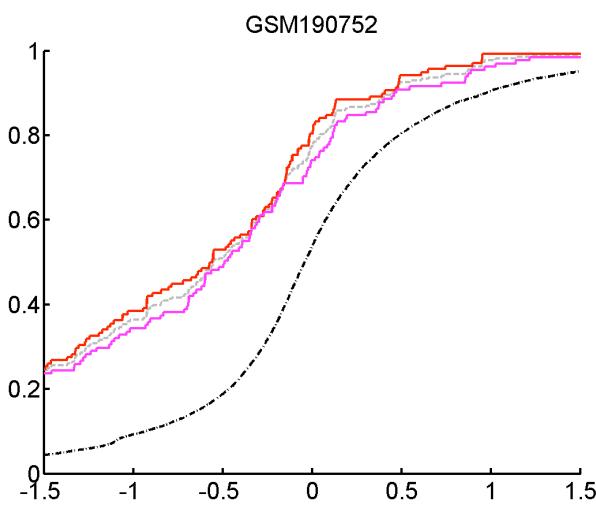
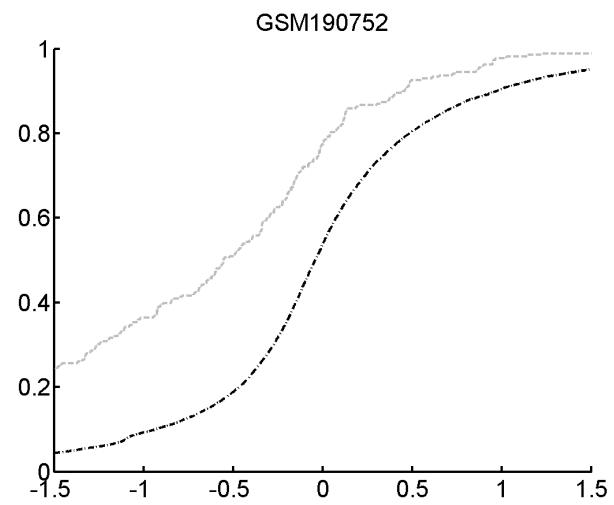
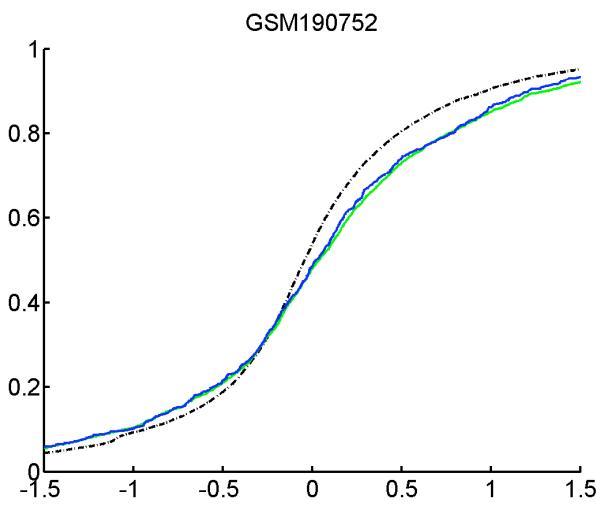
Experiment: A549

mi/siRNA: pooled



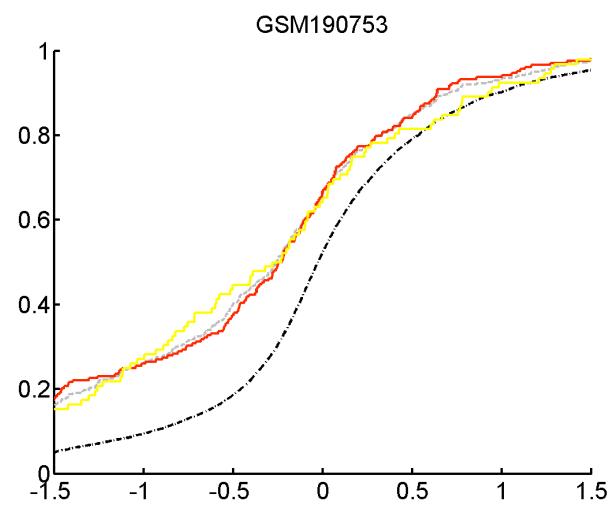
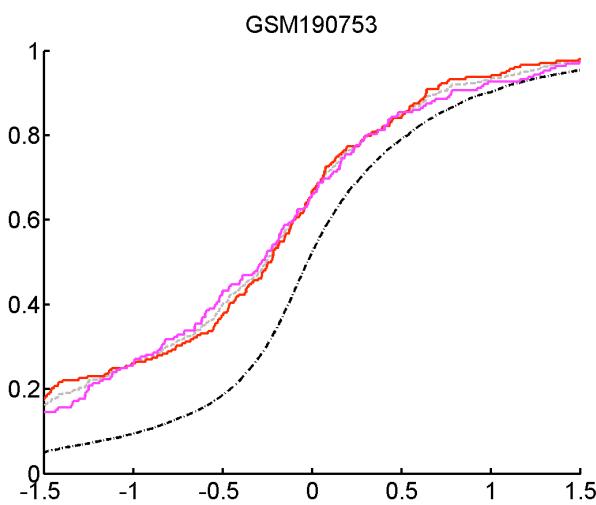
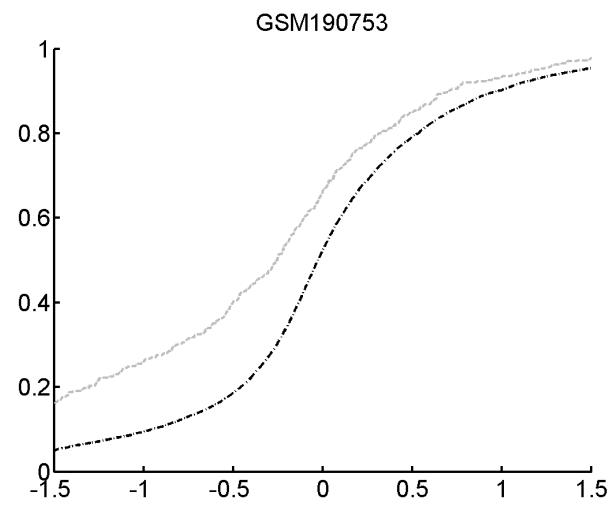
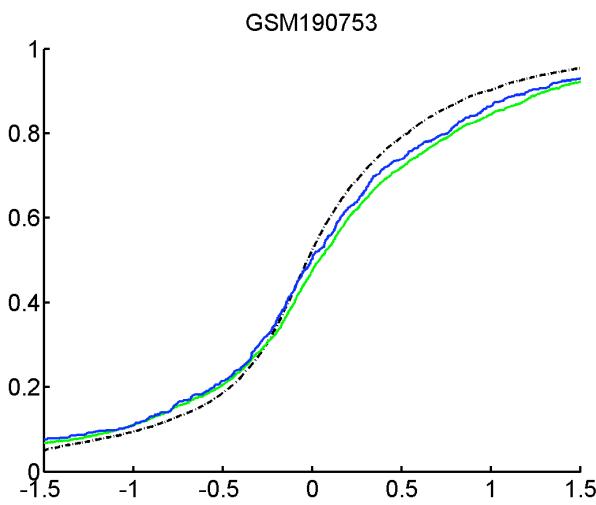
Experiment: GSM190752

mi/siRNA: miR-34a



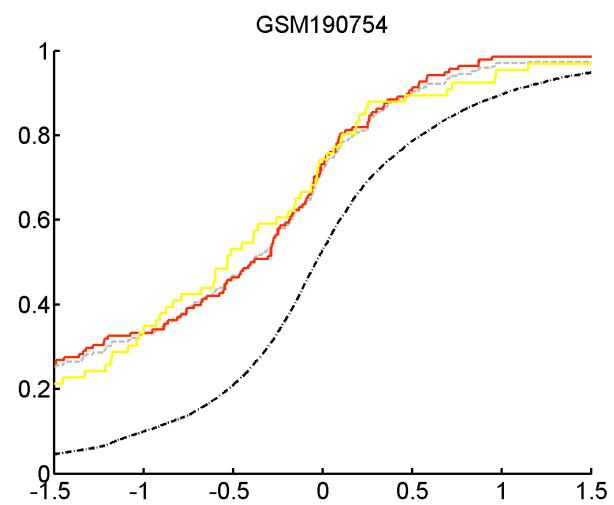
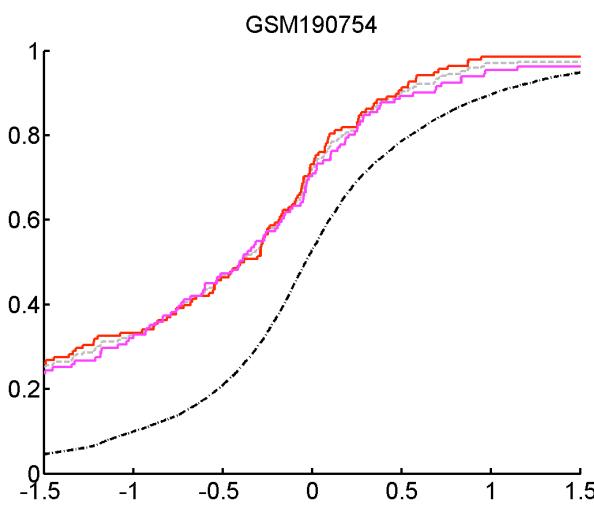
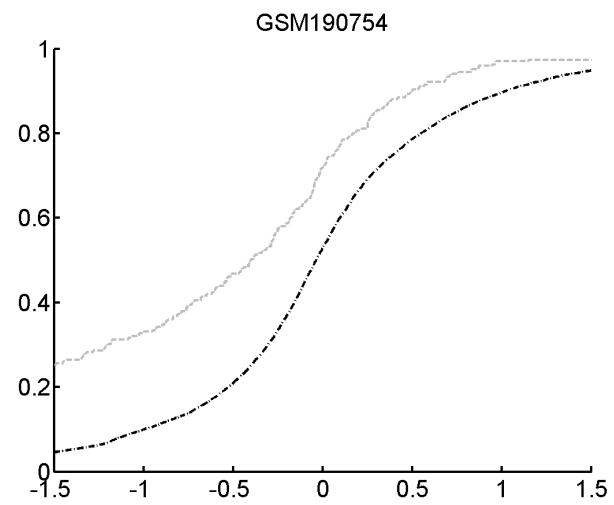
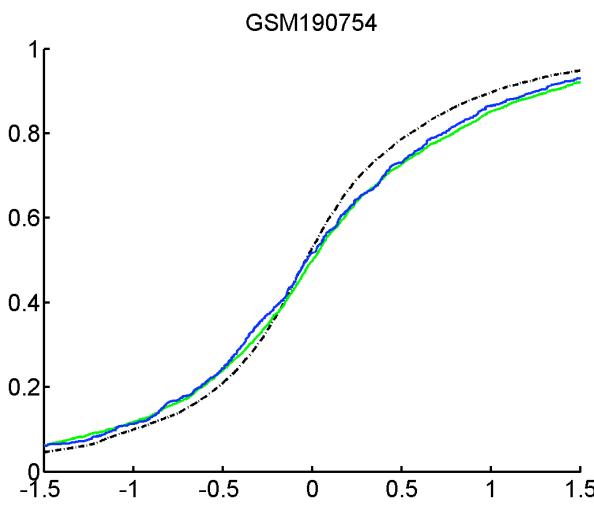
Experiment: GSM190753

mi/siRNA: miR-34b



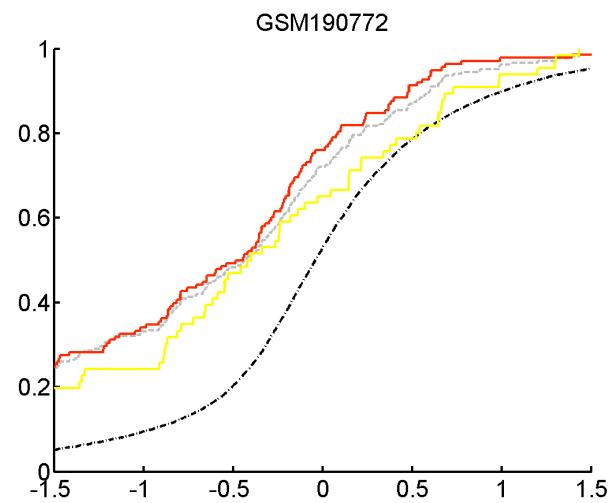
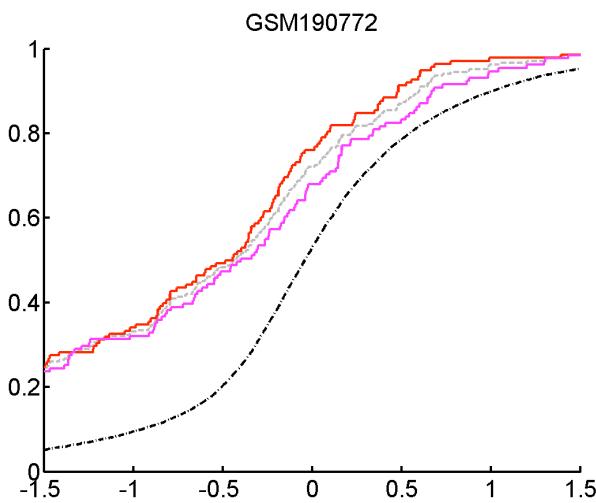
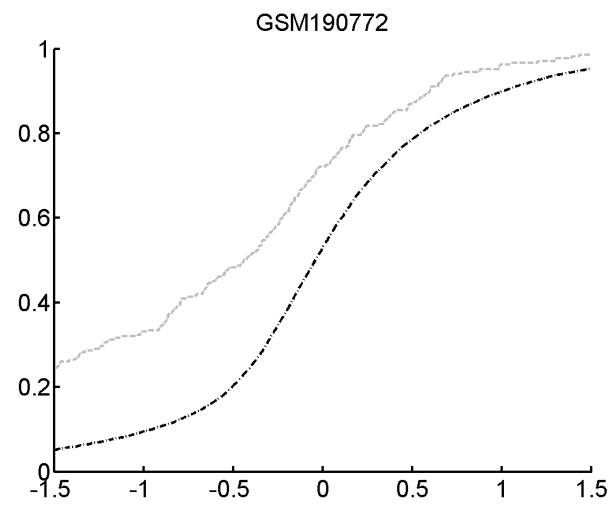
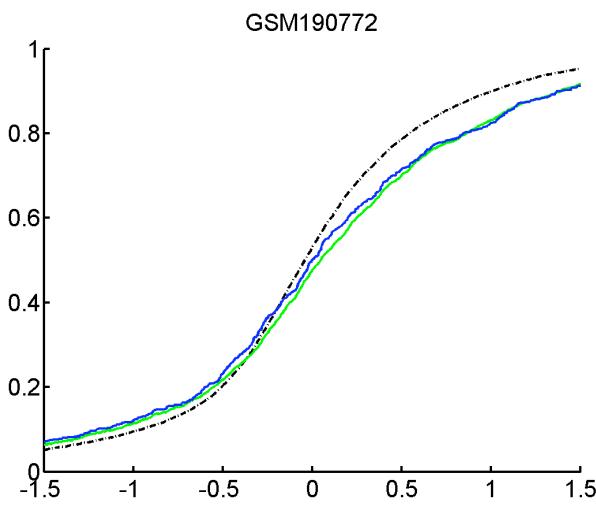
Experiment: GSM190754

mi/siRNA: miR-34c



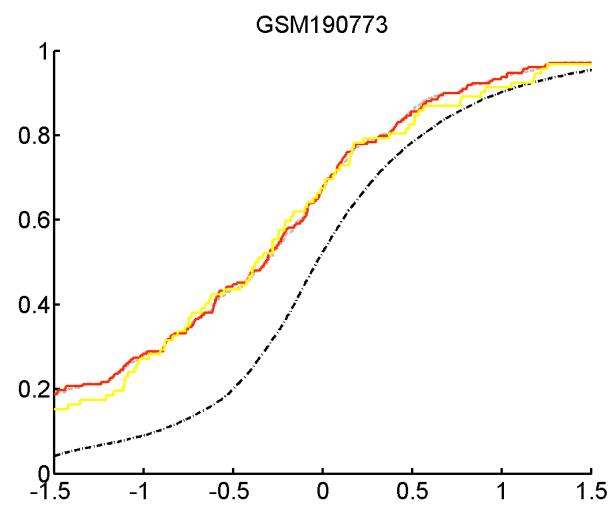
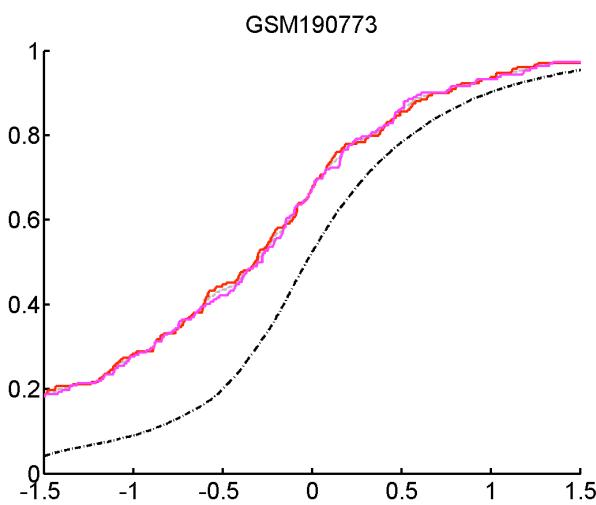
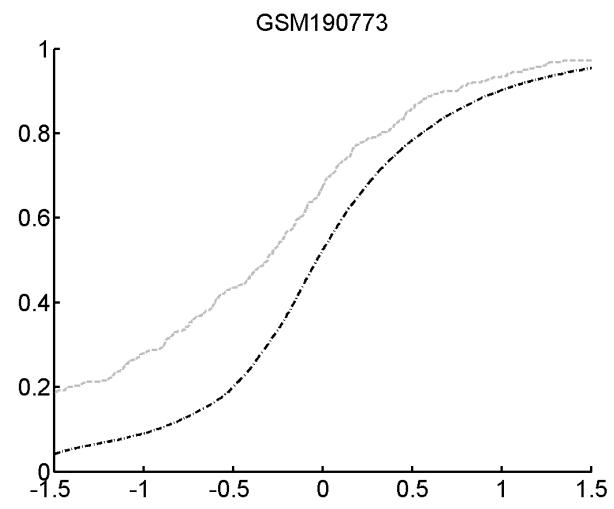
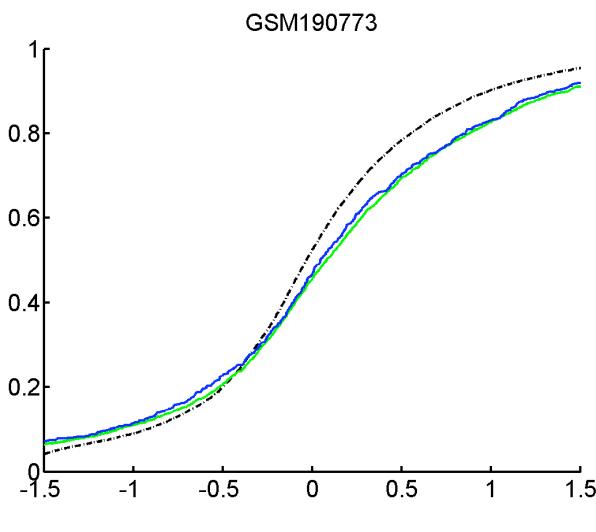
Experiment: GSM190772

mi/siRNA: miR-34a+p53-1026



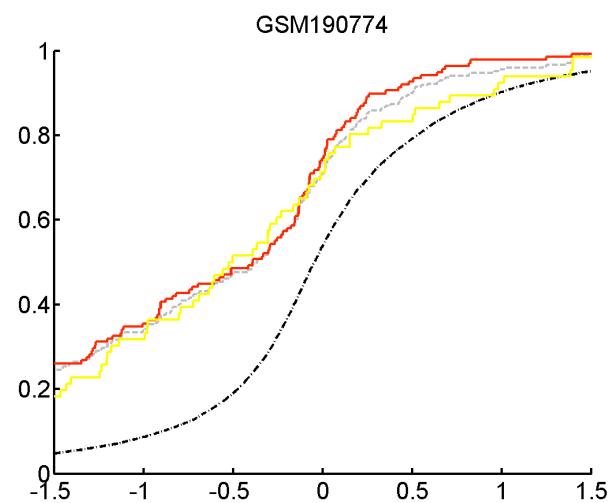
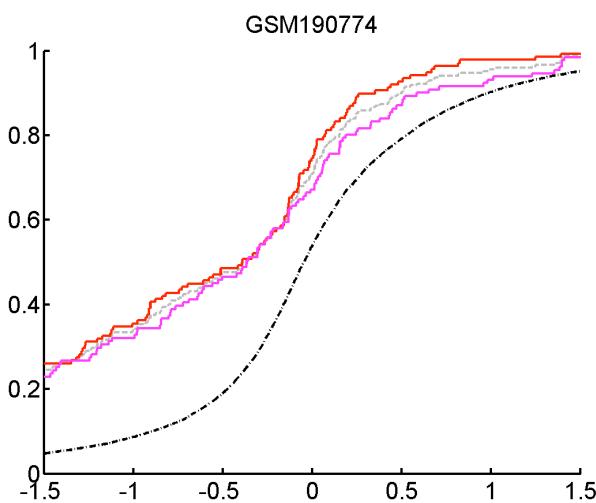
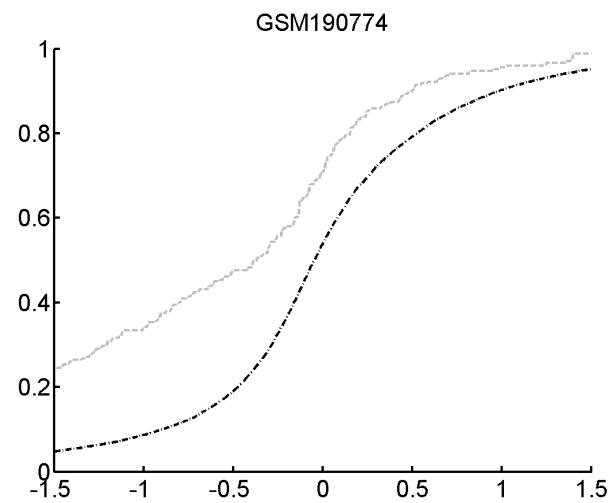
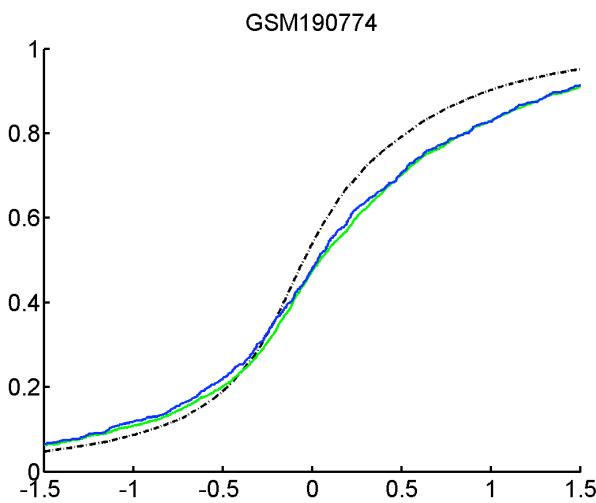
Experiment: GSM190773

mi/siRNA: miR-34b+p53-1026



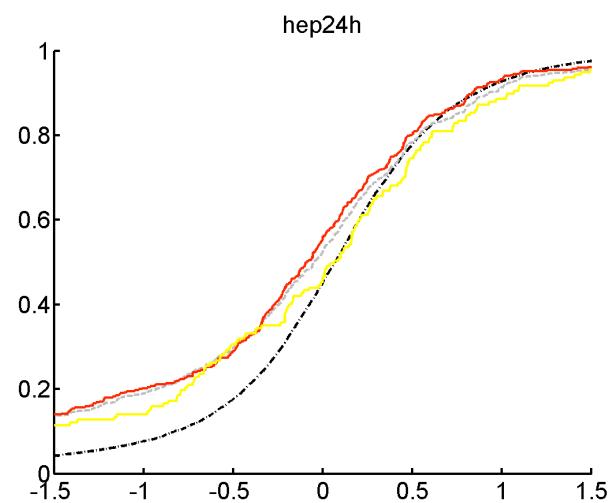
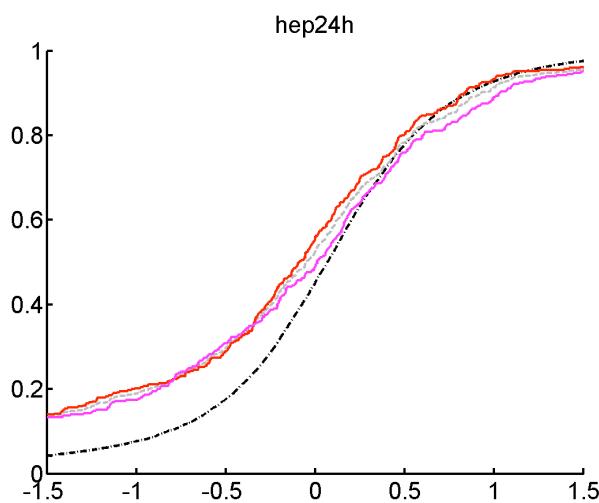
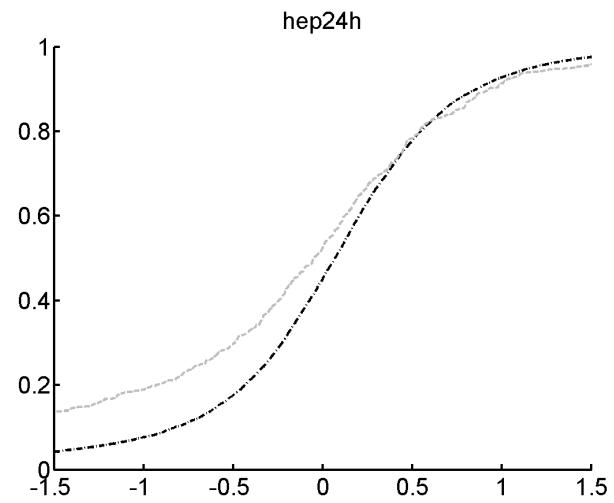
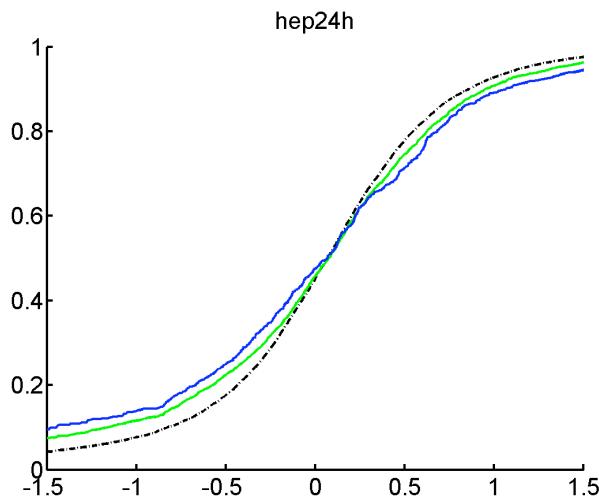
Experiment: GSM190774

mi/siRNA: miR-34c+p53-1026



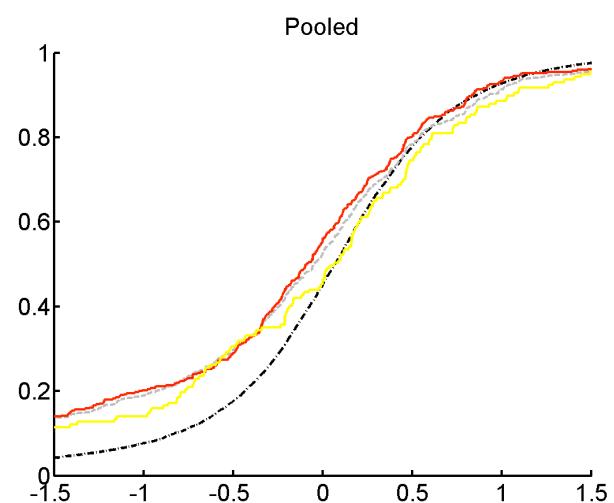
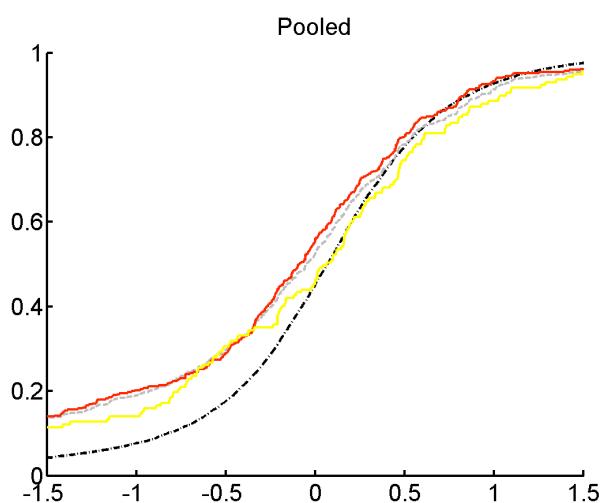
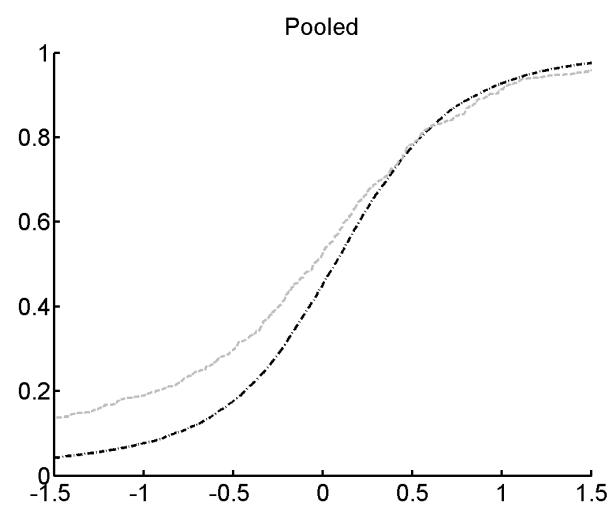
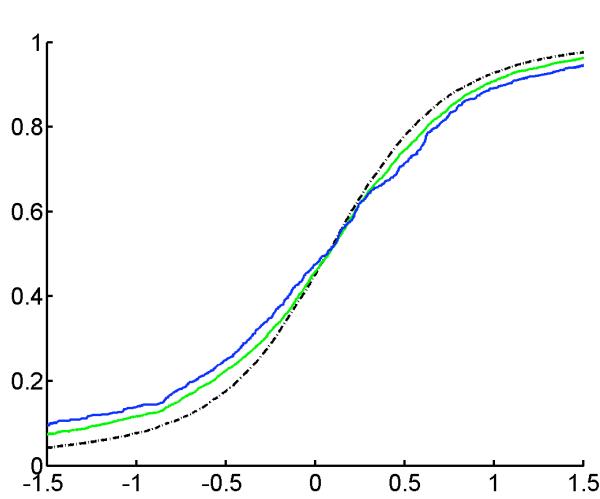
Experiment: hep24h

mi/siRNA: miR-124



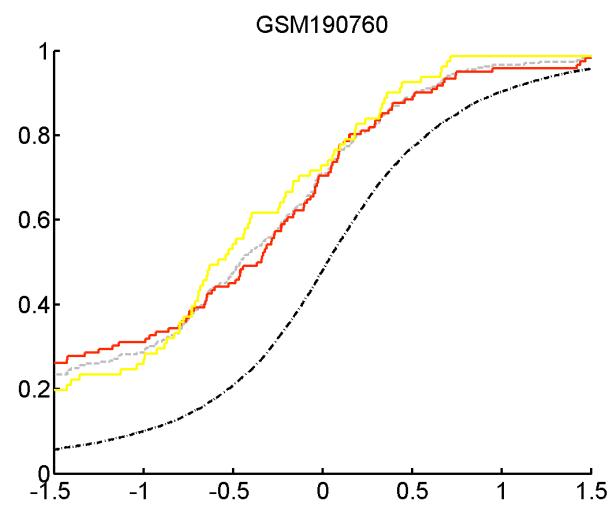
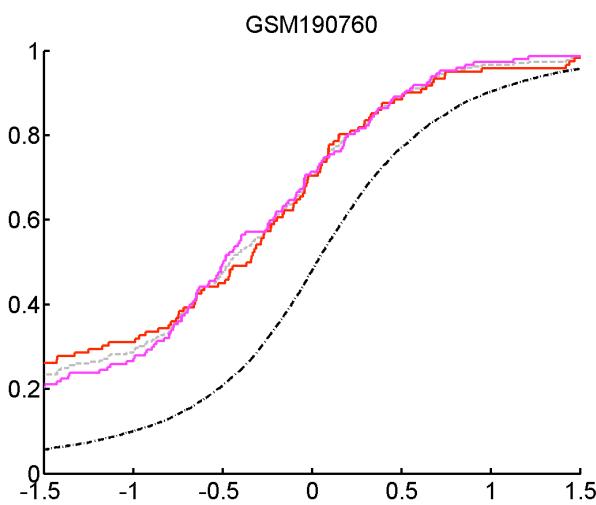
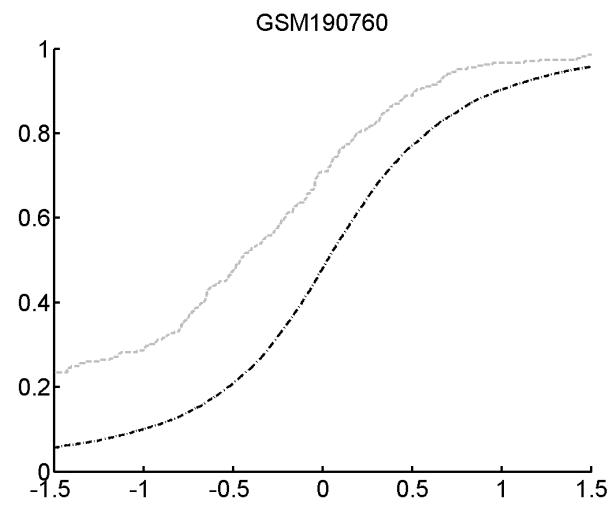
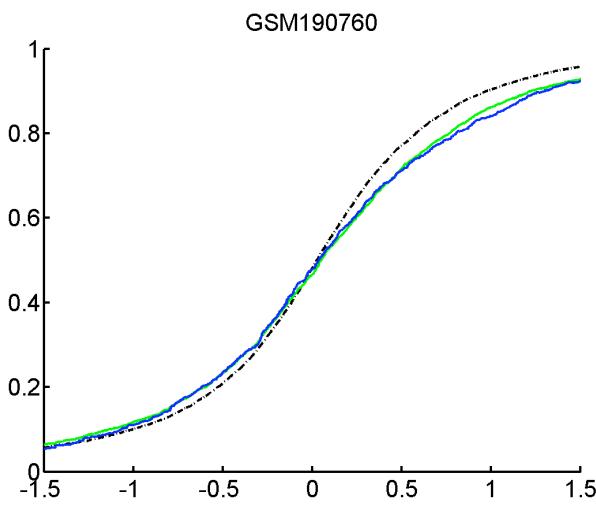
Experiment: HepG2

mi/siRNA: pooled



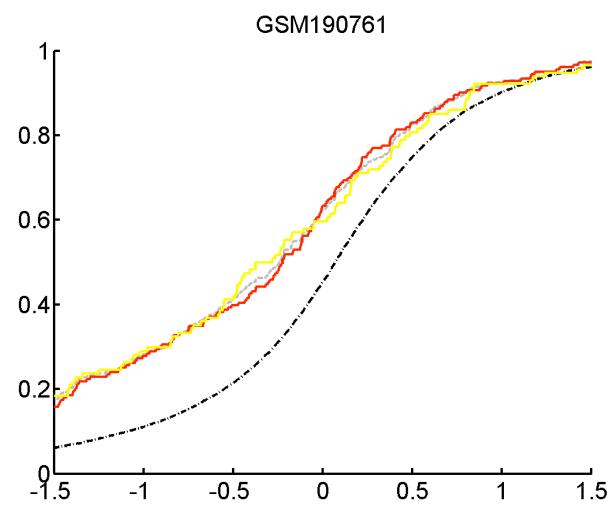
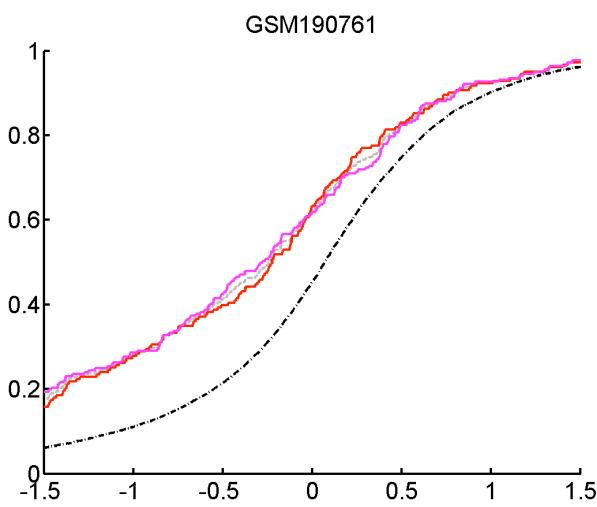
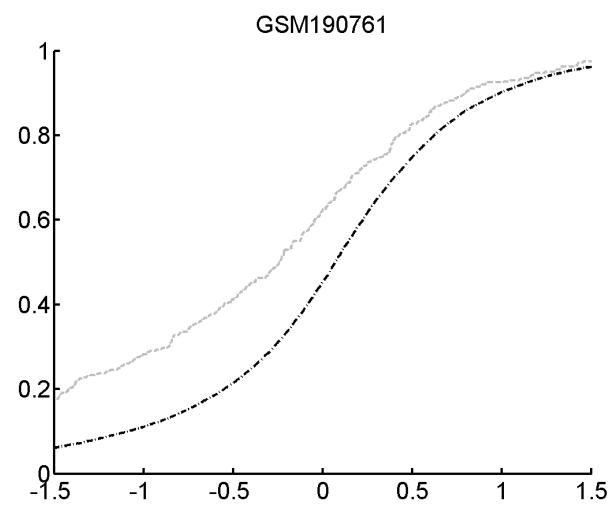
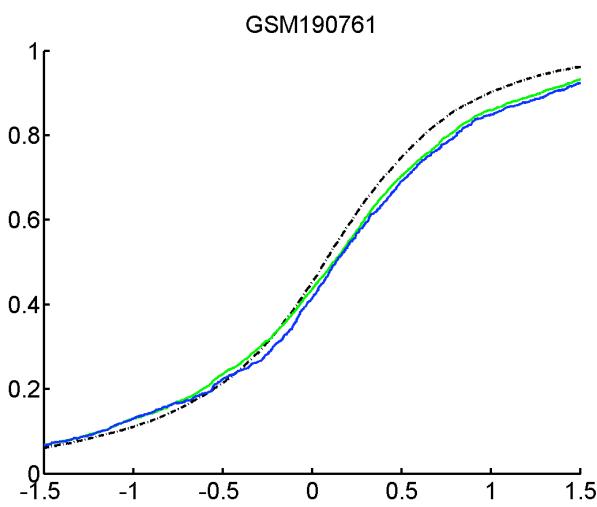
Experiment: GSM190760

mi/siRNA: miR-34a



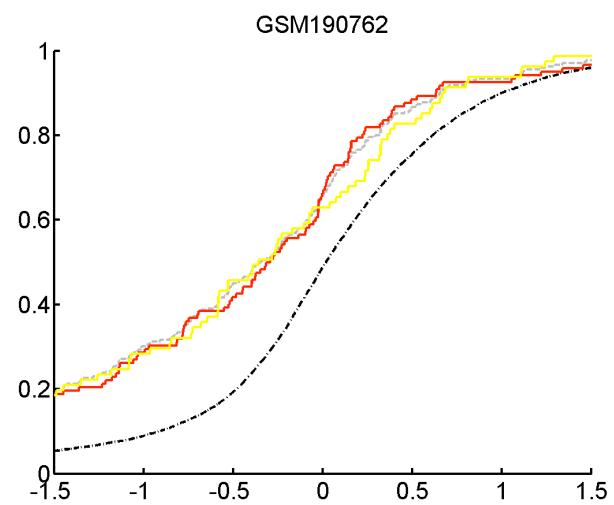
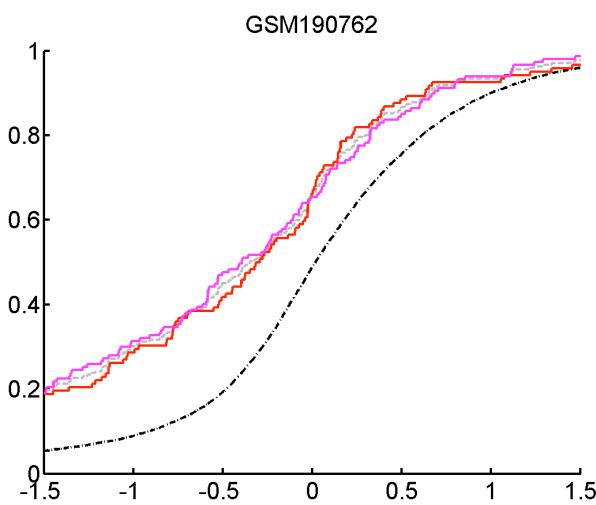
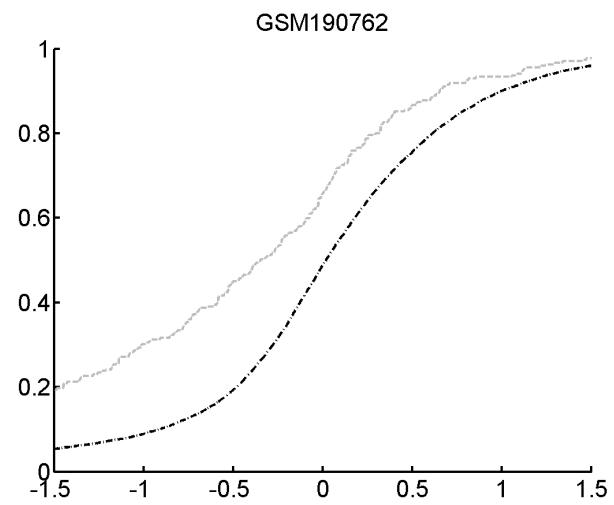
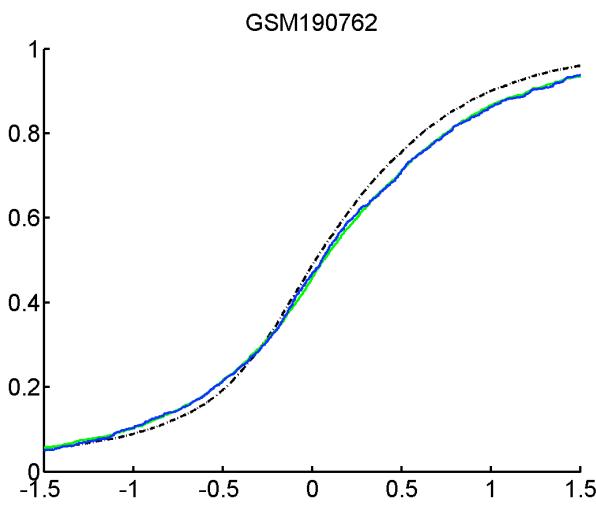
Experiment: GSM190761

mi/siRNA: miR-34b



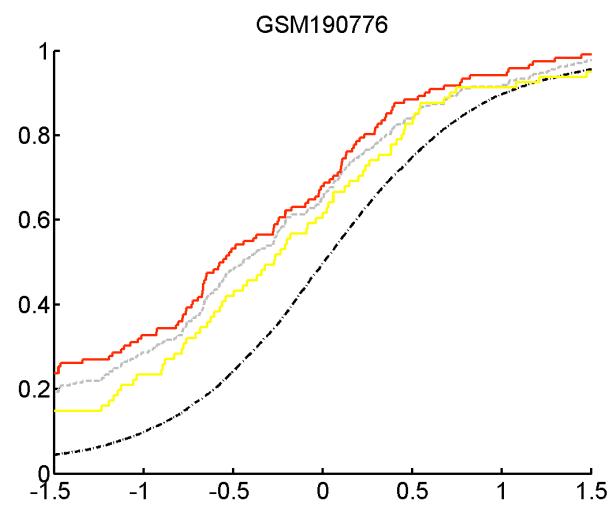
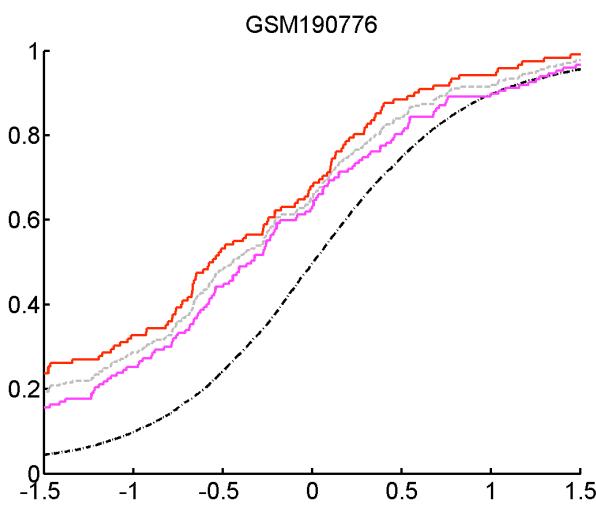
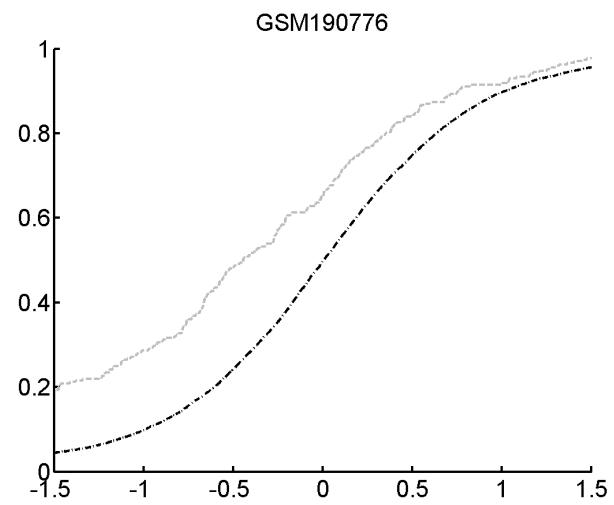
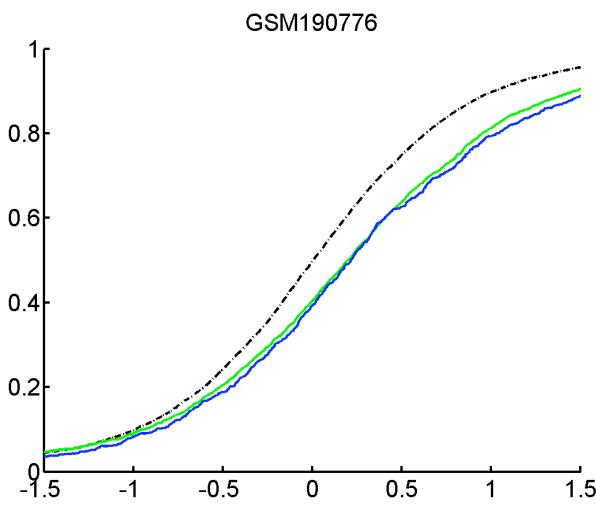
Experiment: GSM190762

mi/siRNA: miR-34c



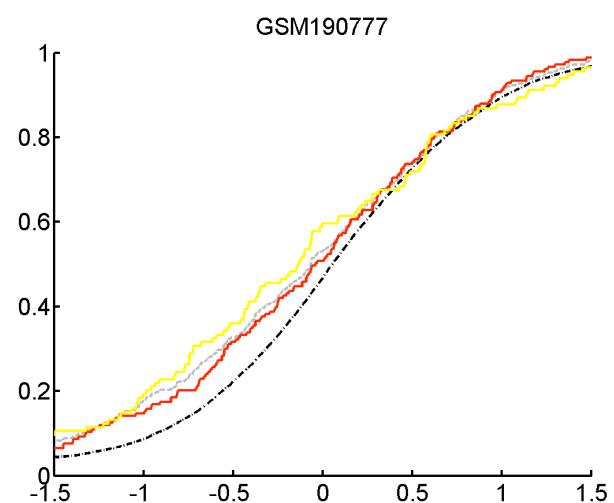
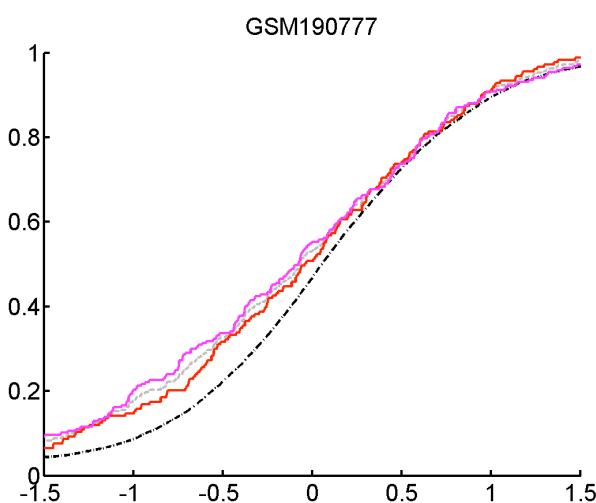
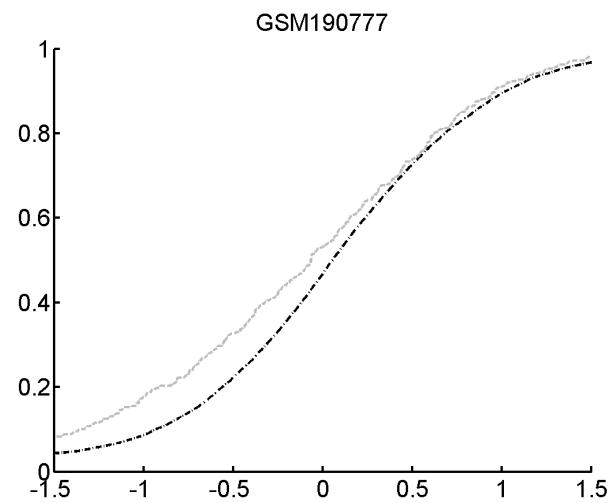
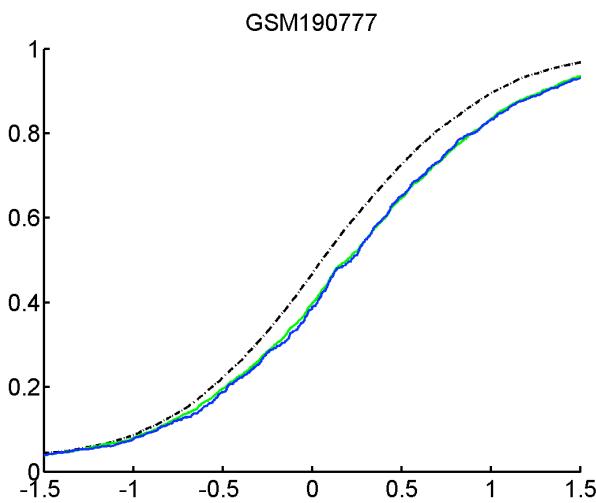
Experiment: GSM190776

mi/siRNA: miR-34a+-p53-1026



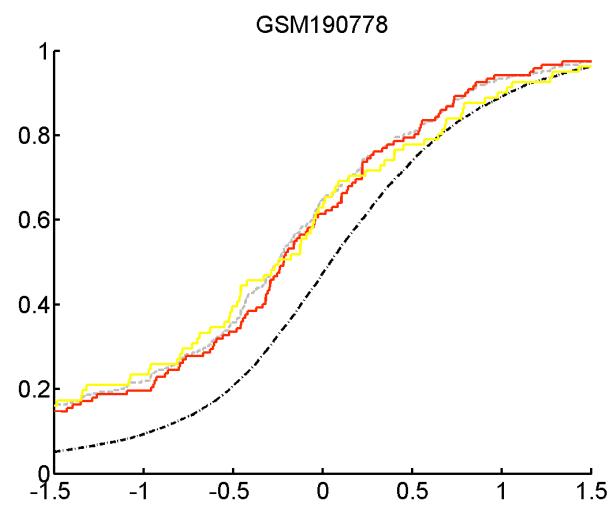
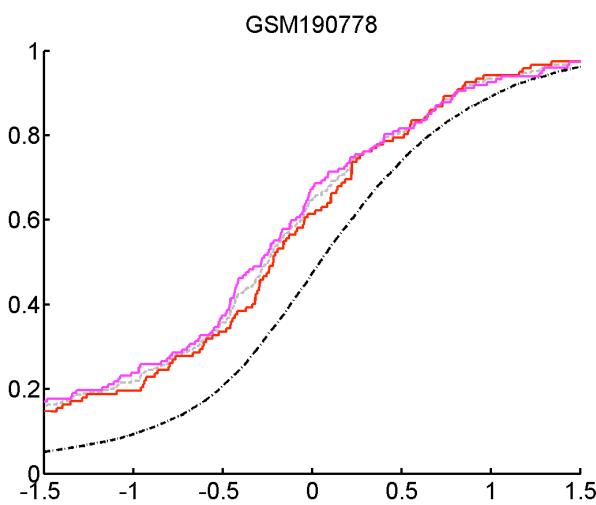
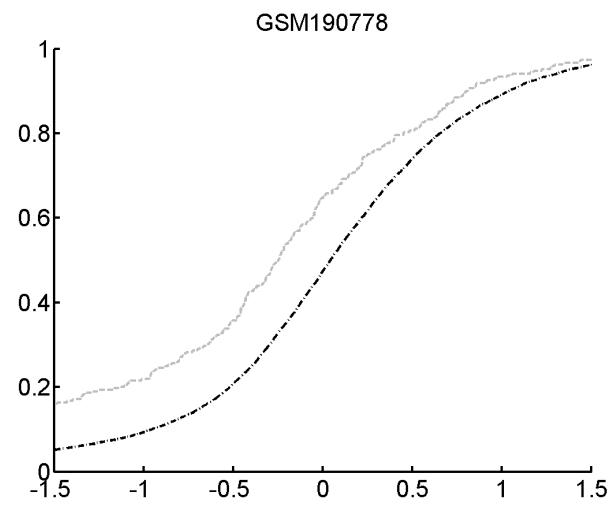
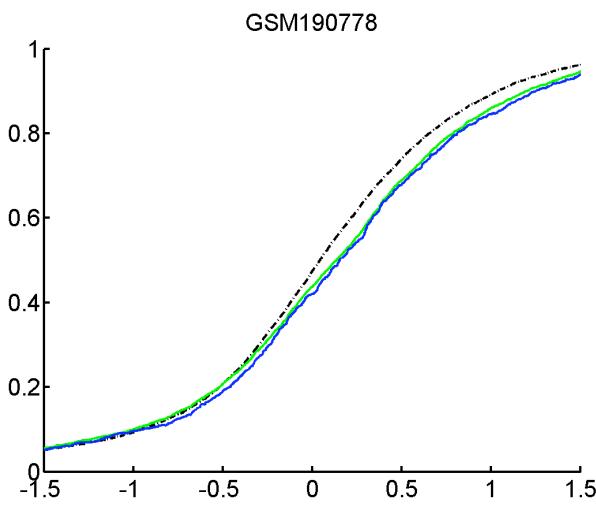
Experiment: GSM190777

mi/siRNA: miR-34b+-p53-1026



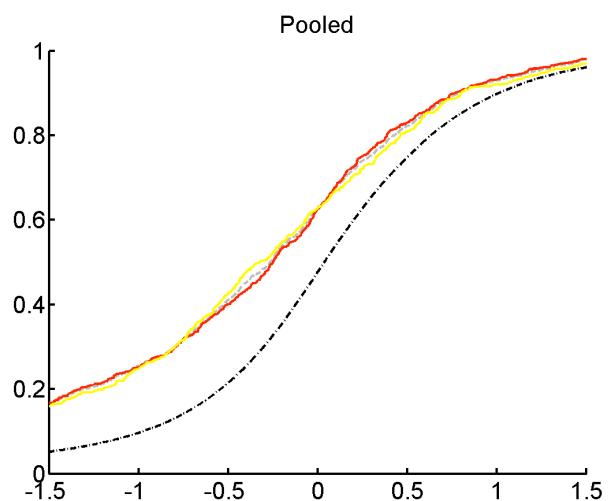
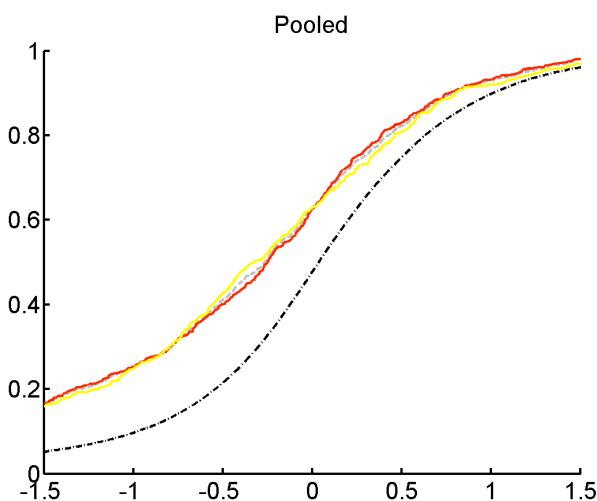
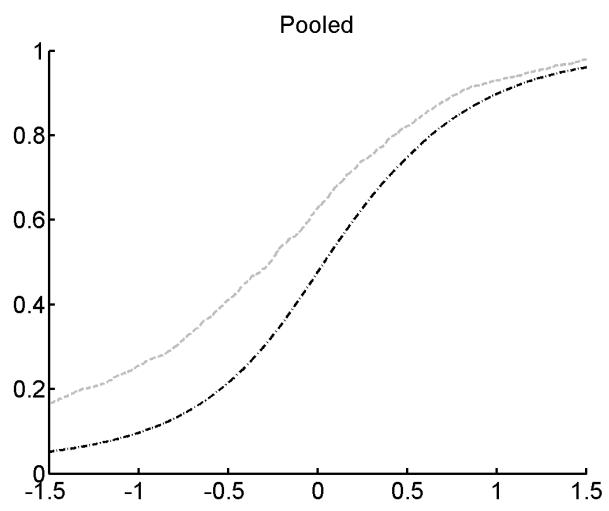
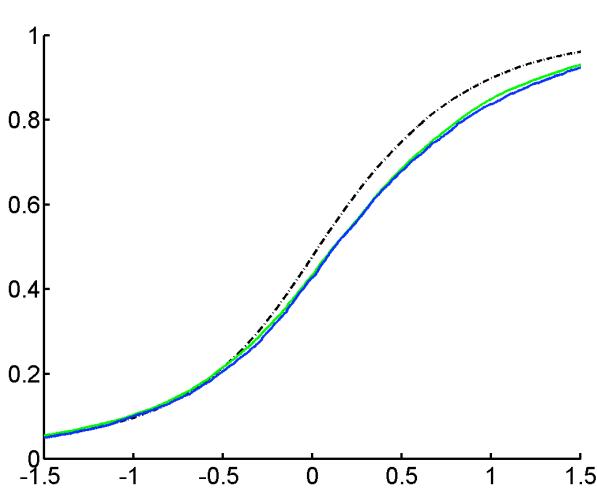
Experiment: GSM190778

mi/siRNA: miR-34c+-p53-1026



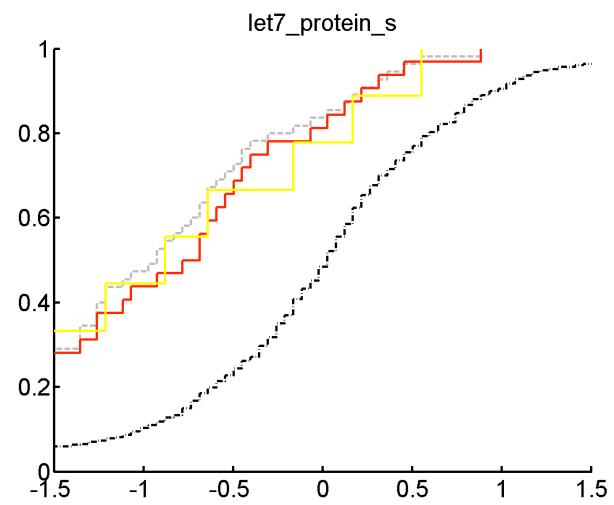
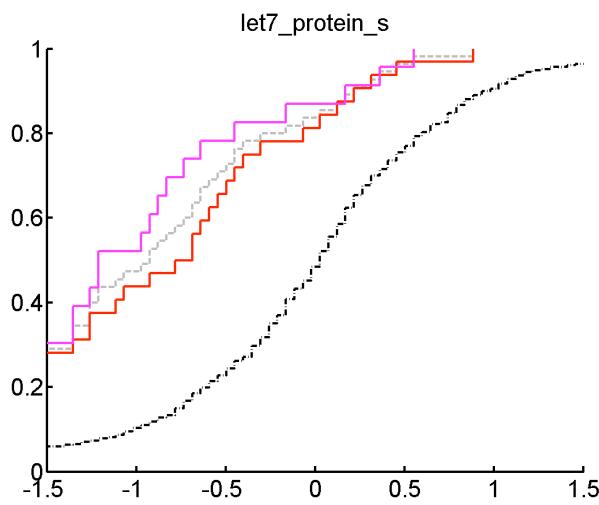
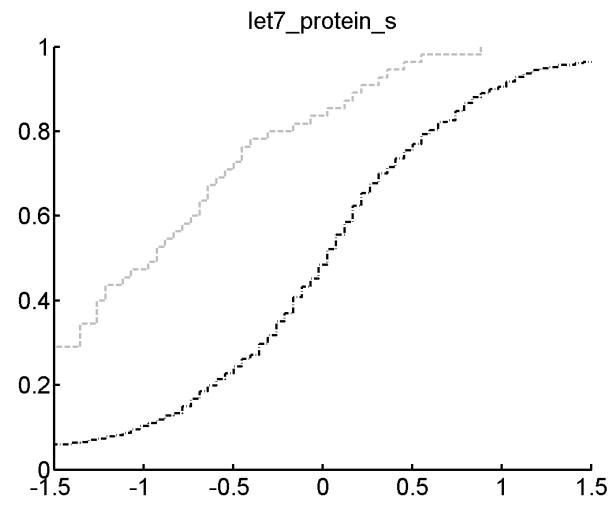
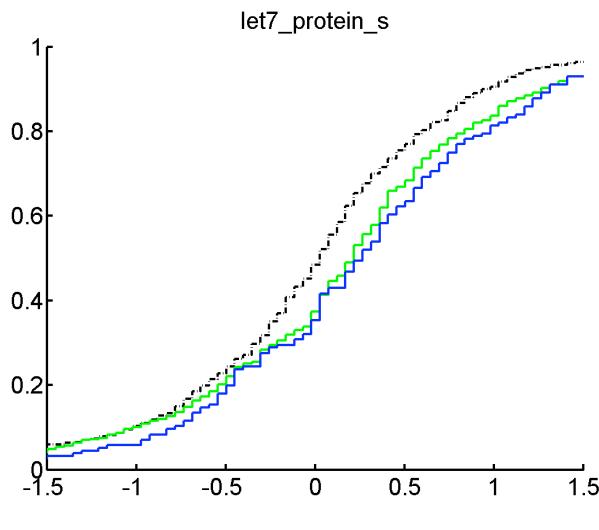
Experiment: TOV21G

mi/siRNA: pooled



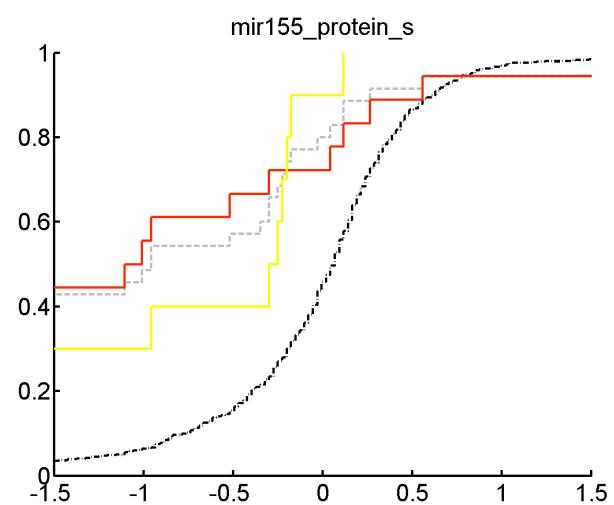
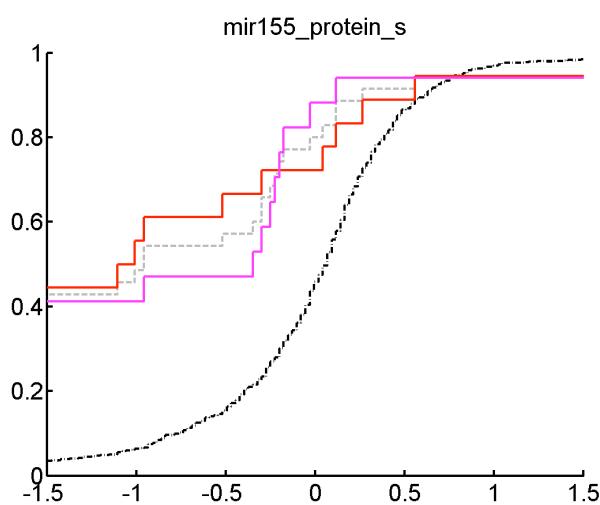
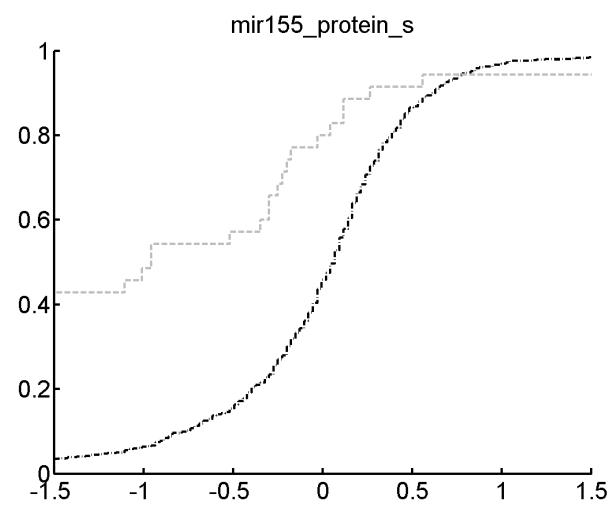
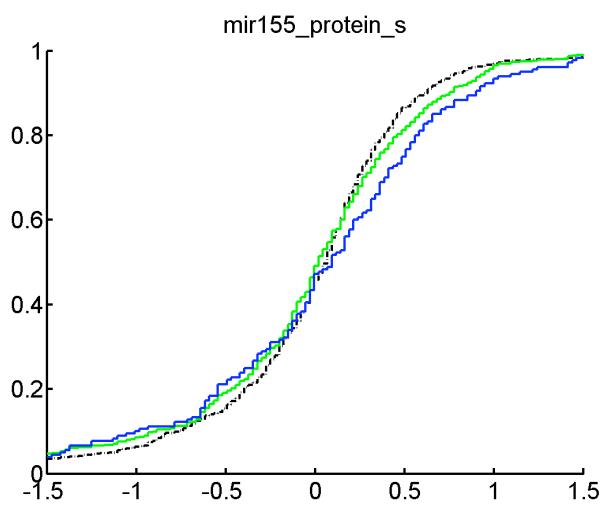
Experiment: let7-protein-s

mi/siRNA: let-7b



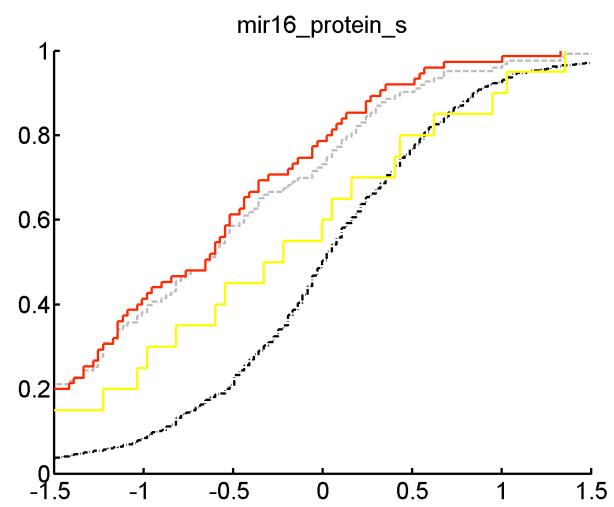
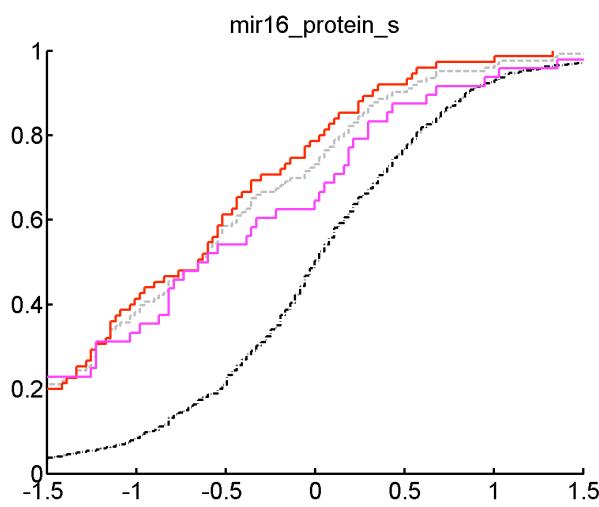
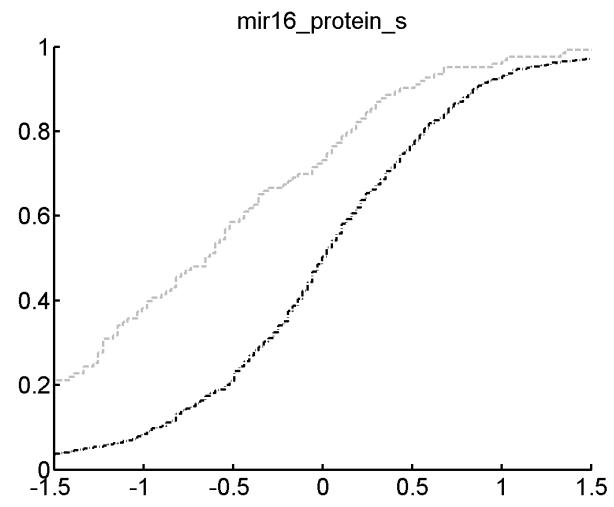
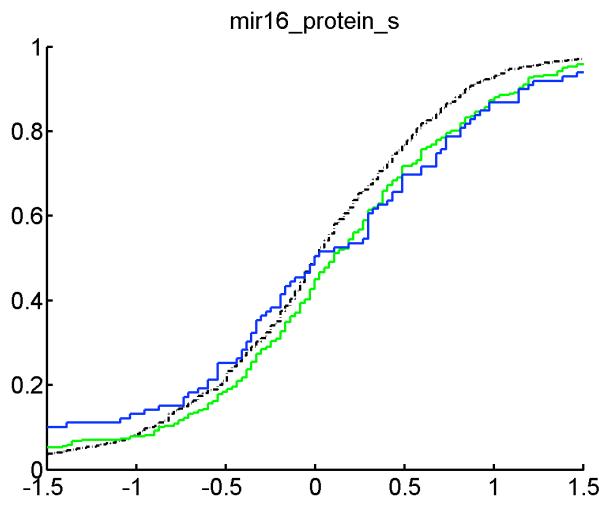
Experiment: mir155-protein-s

mi/siRNA: miR-155



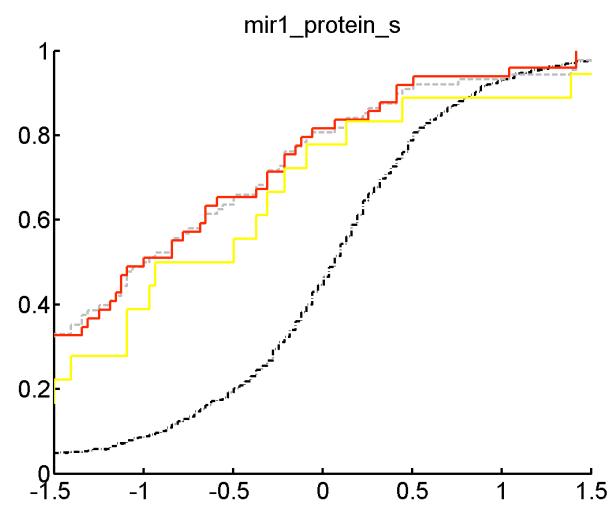
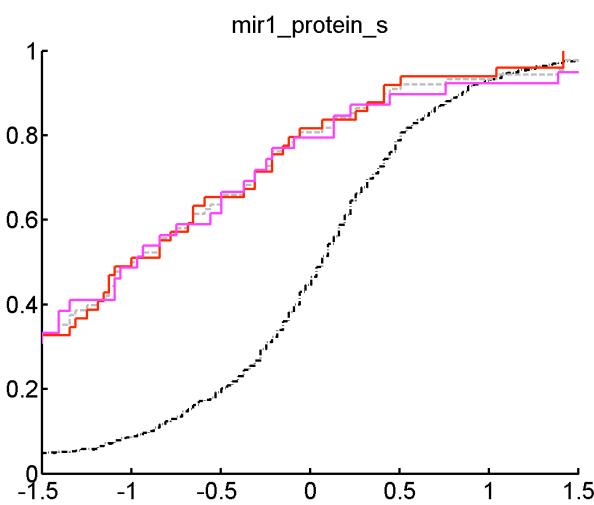
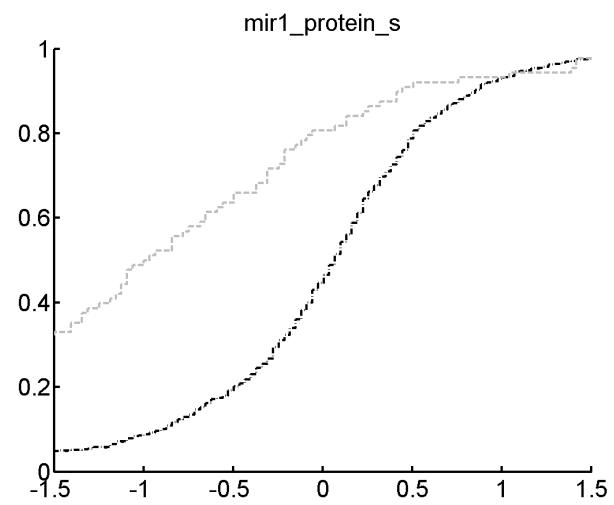
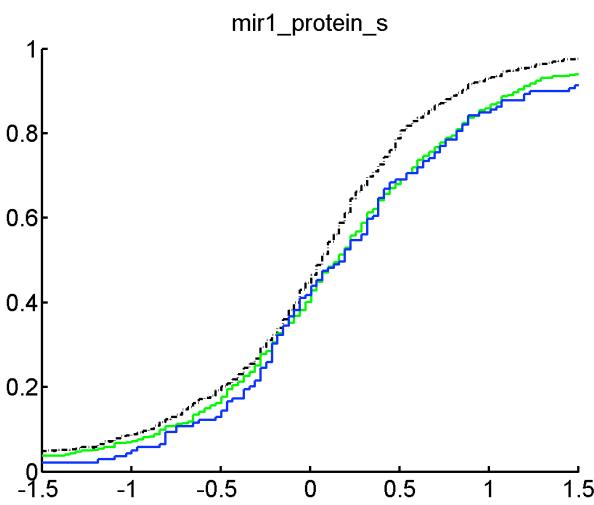
Experiment: mir16-protein-s

mi/siRNA: miR-16



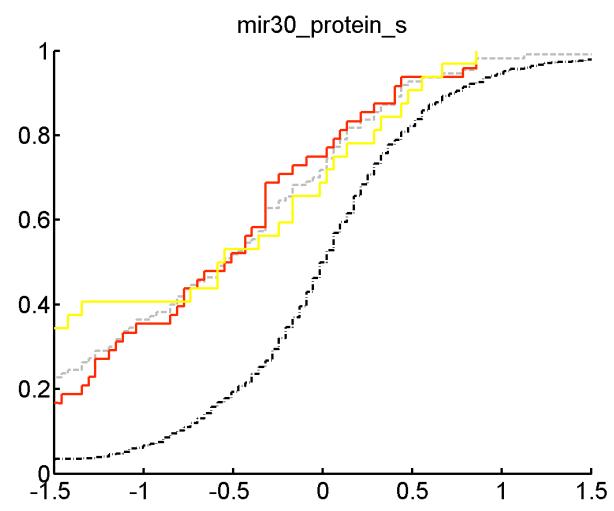
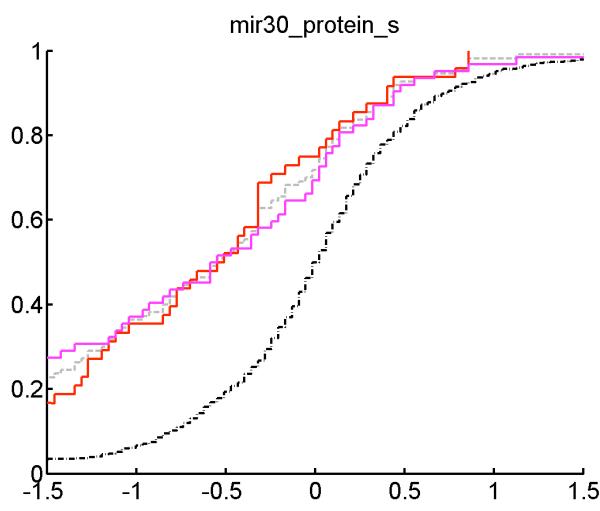
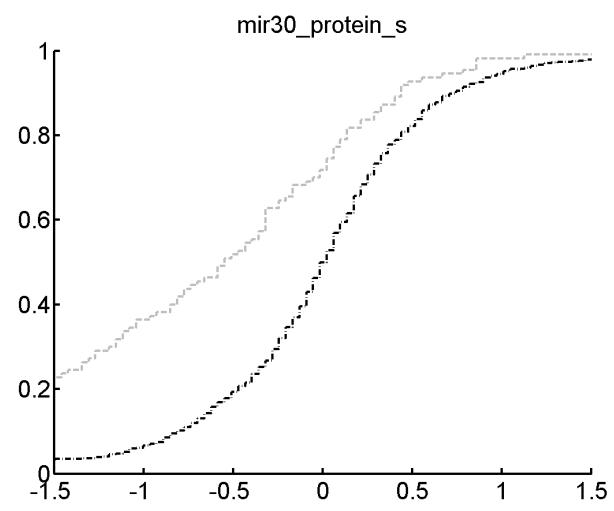
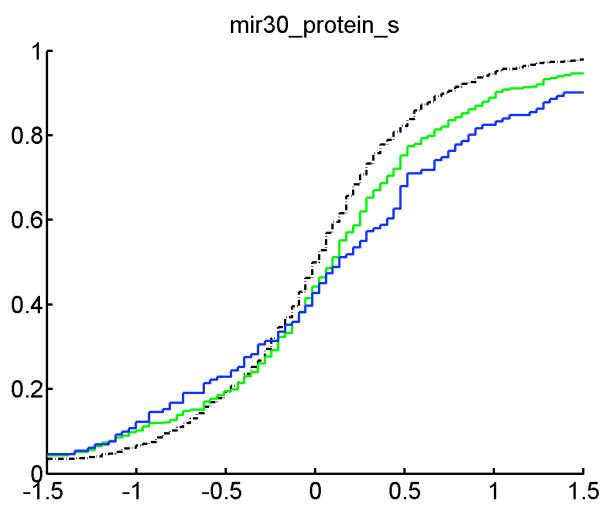
Experiment: mir1-protein-s

mi/siRNA: miR-1



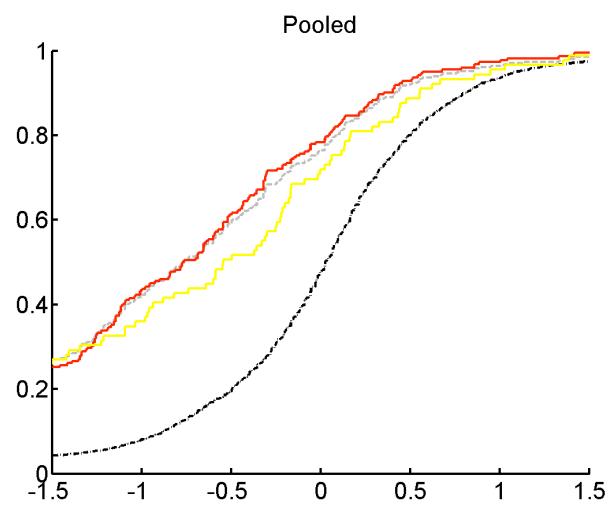
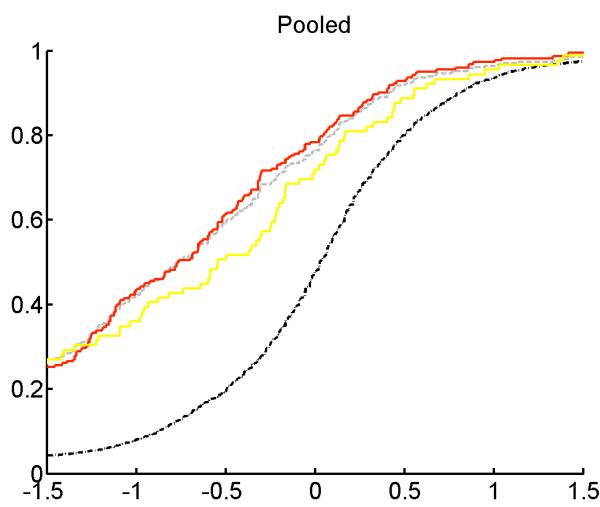
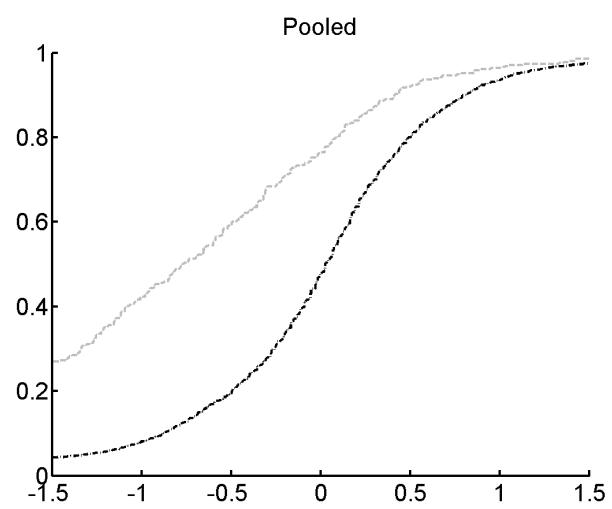
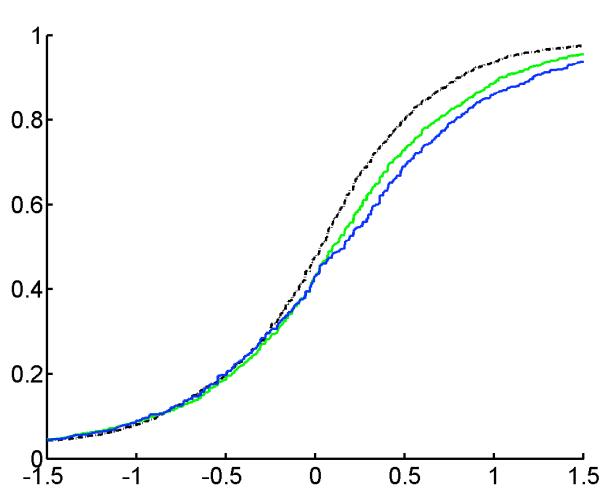
Experiment: mir30-protein-s

mi/siRNA: miR-30a



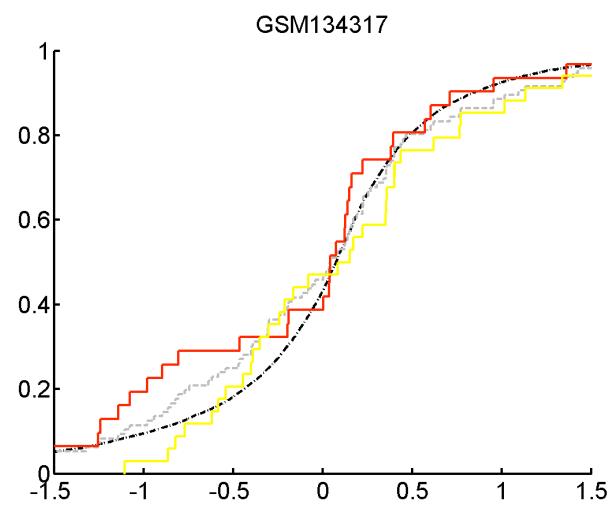
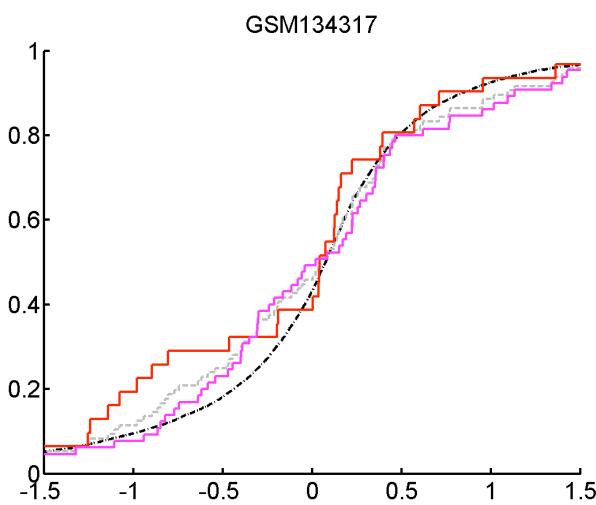
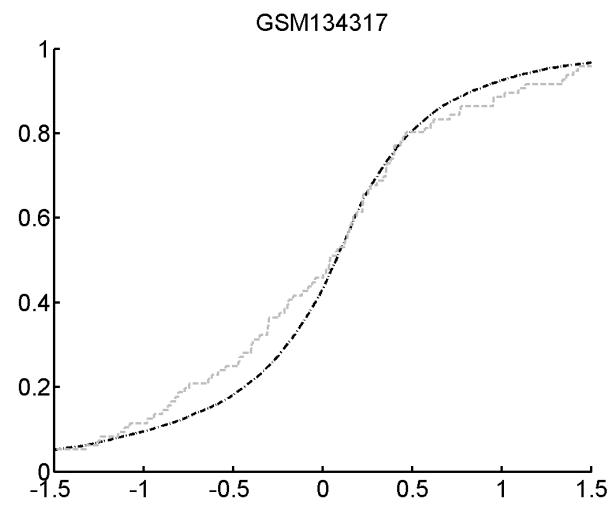
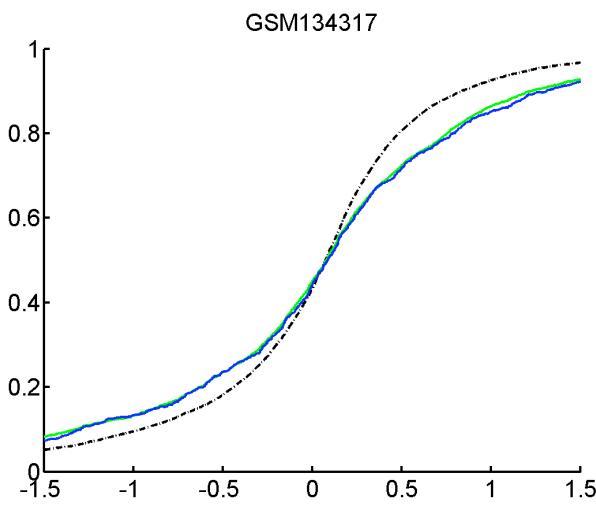
Experiment: protein

mi/siRNA: pooled



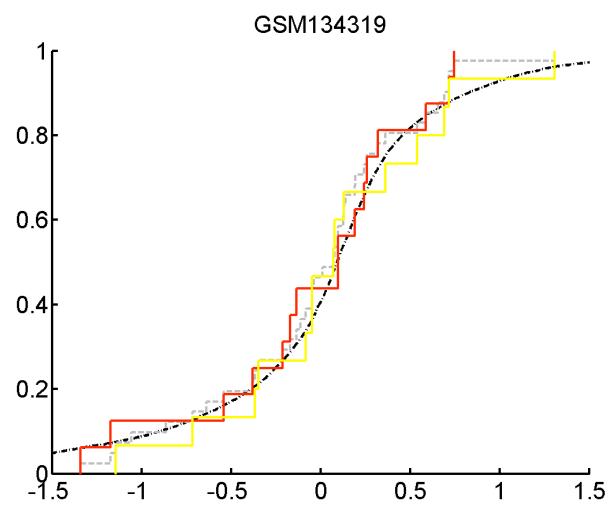
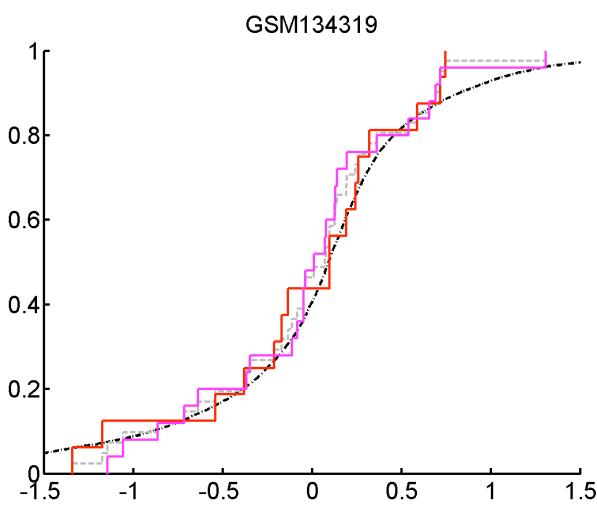
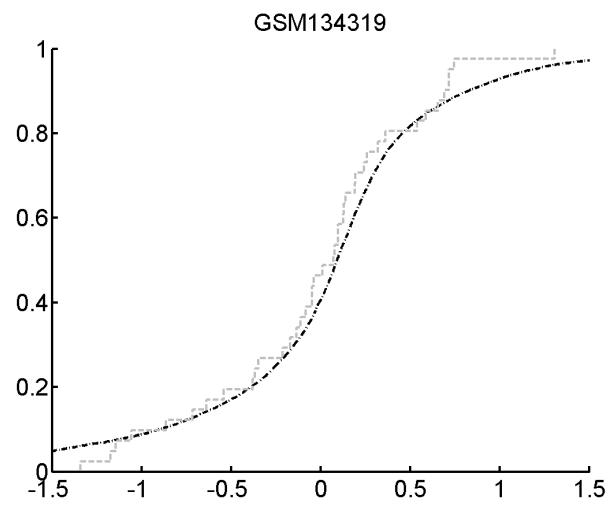
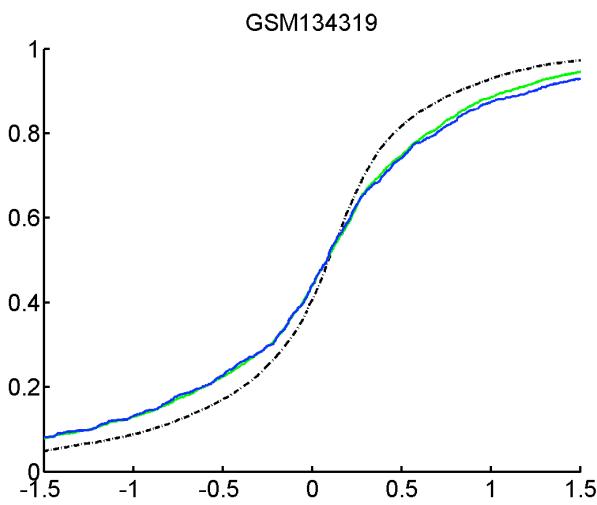
Experiment: GSM134317

mi/siRNA: PIK3CA-2629



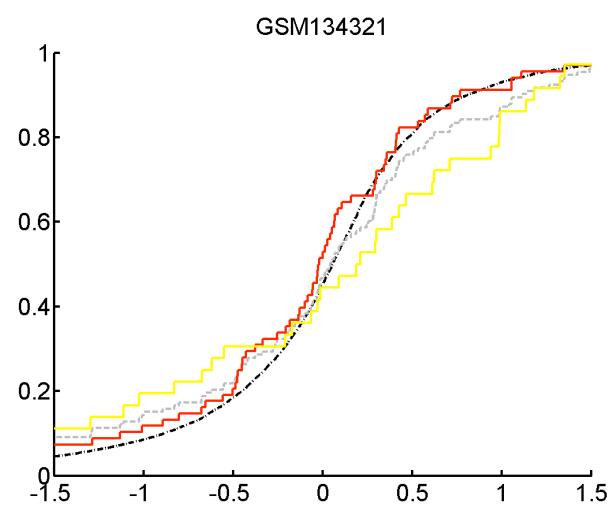
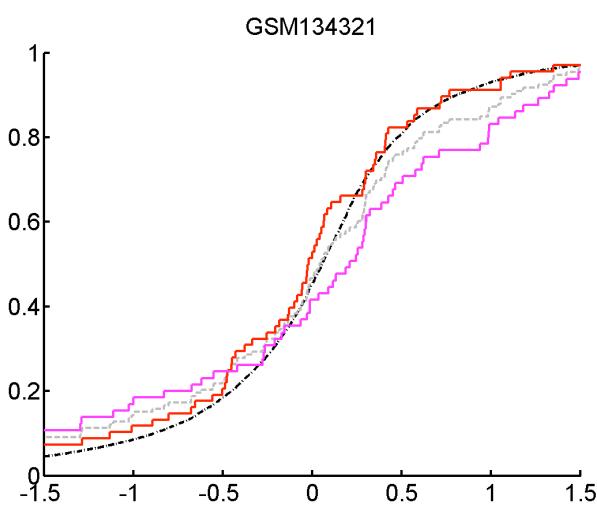
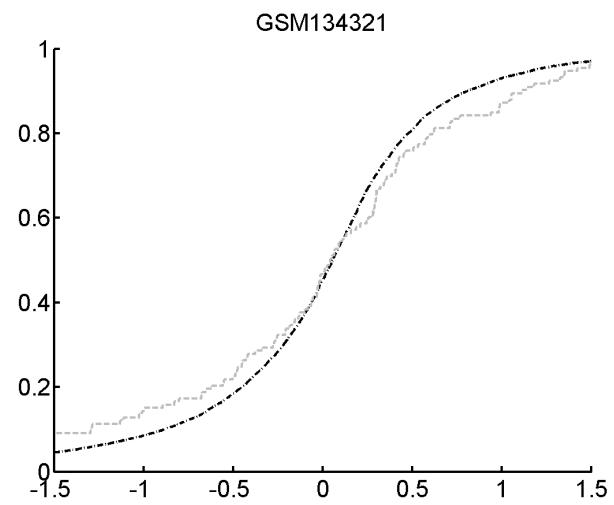
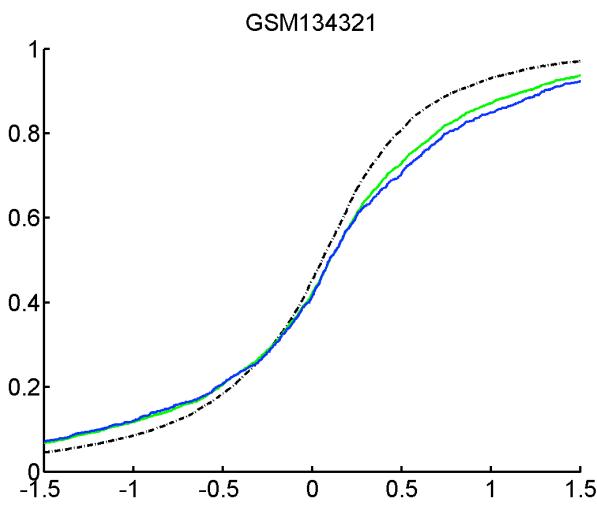
Experiment: GSM134319

mi/siRNA: MPHOSPH1-2692



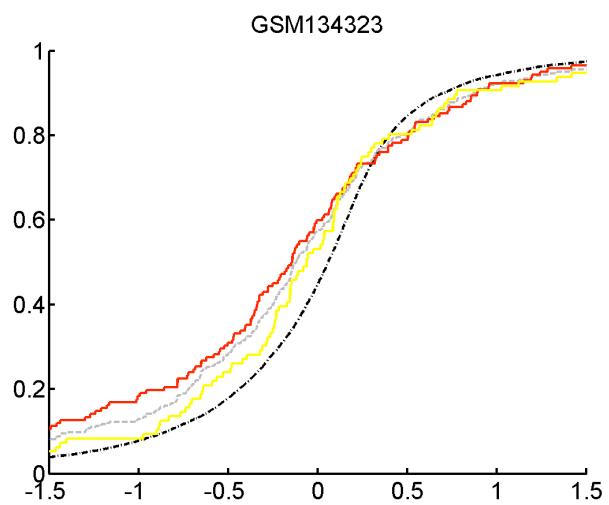
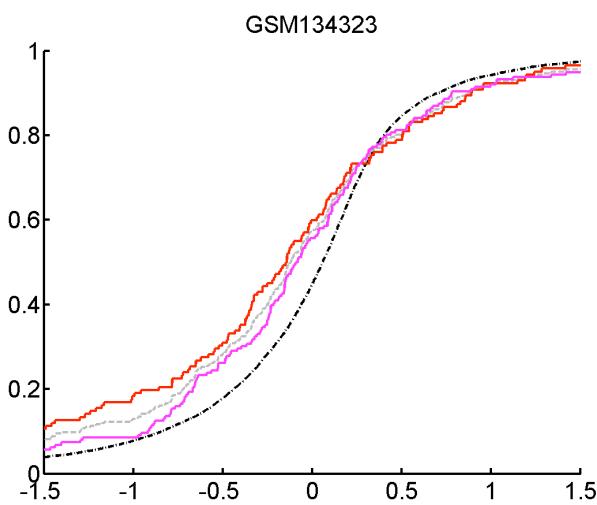
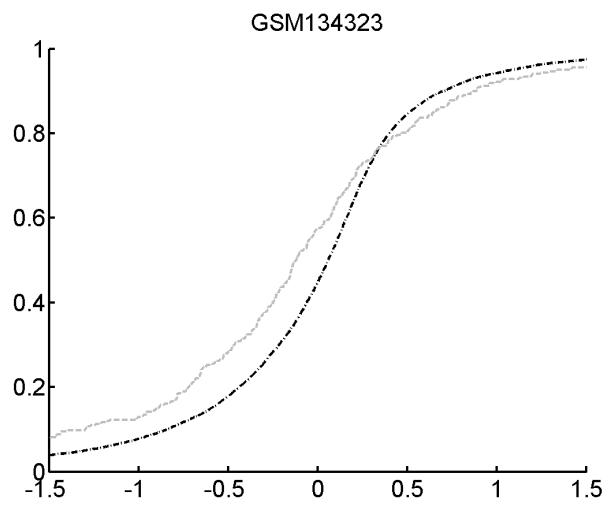
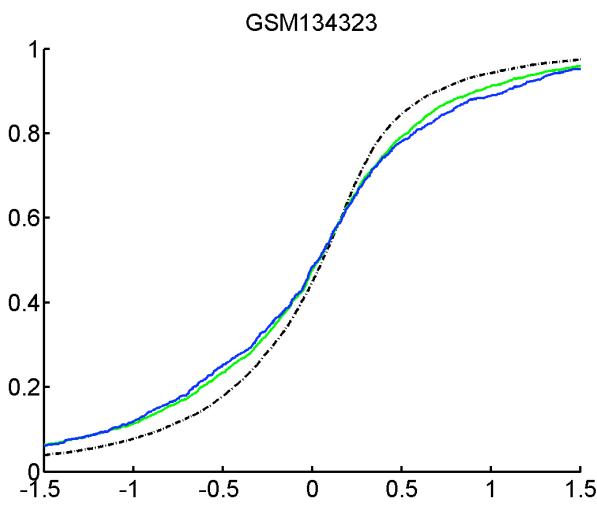
Experiment: GSM134321

mi/siRNA: SOS1-1582



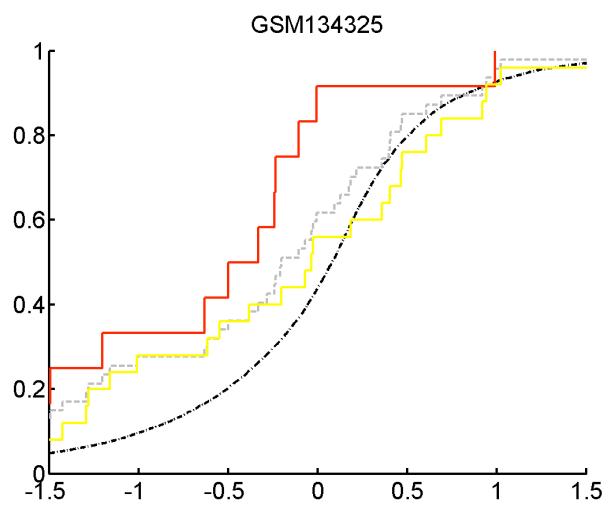
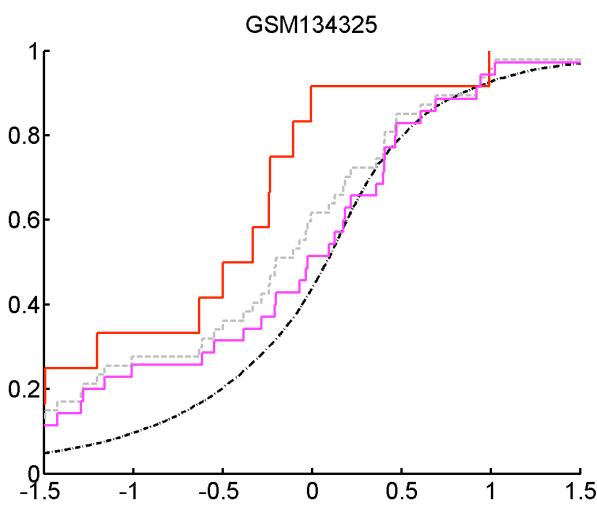
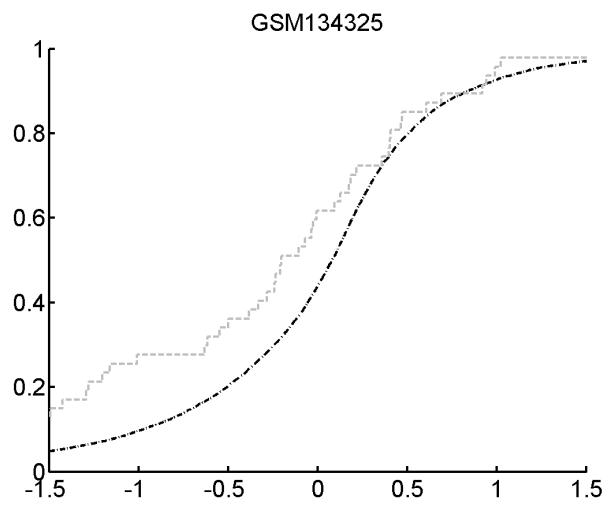
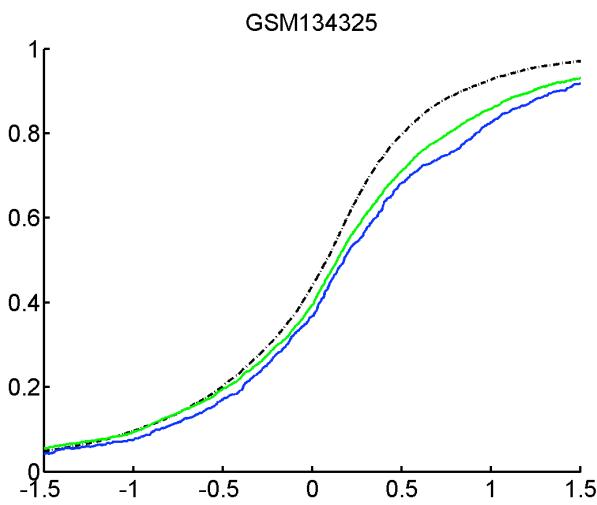
Experiment: GSM134323

mi/siRNA: PRKCE-1295



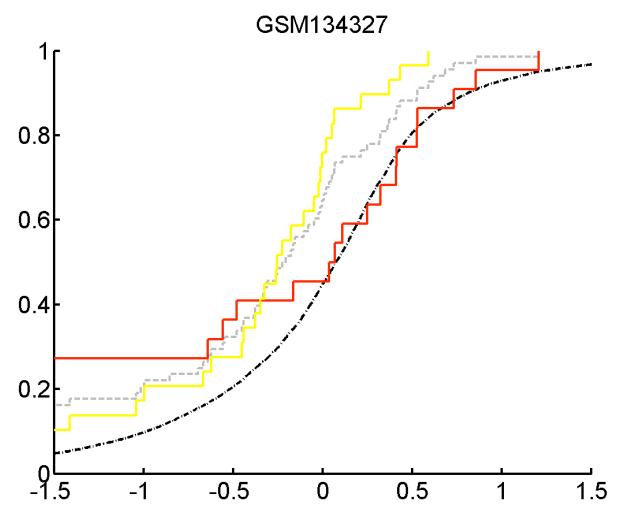
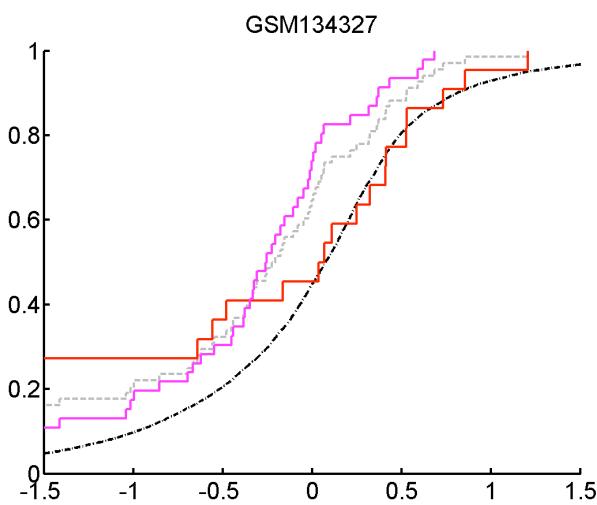
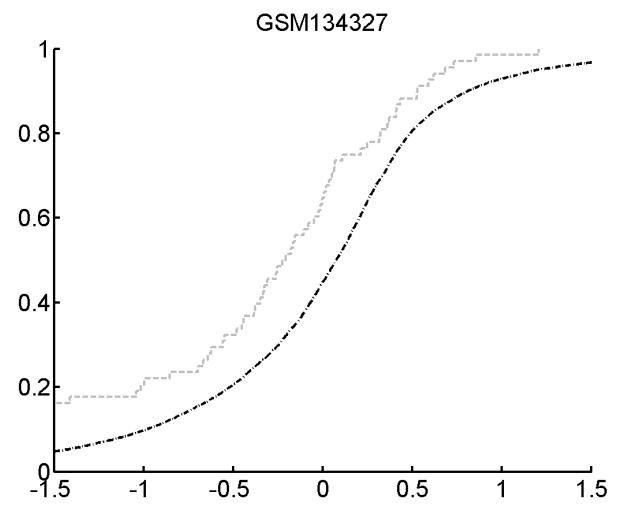
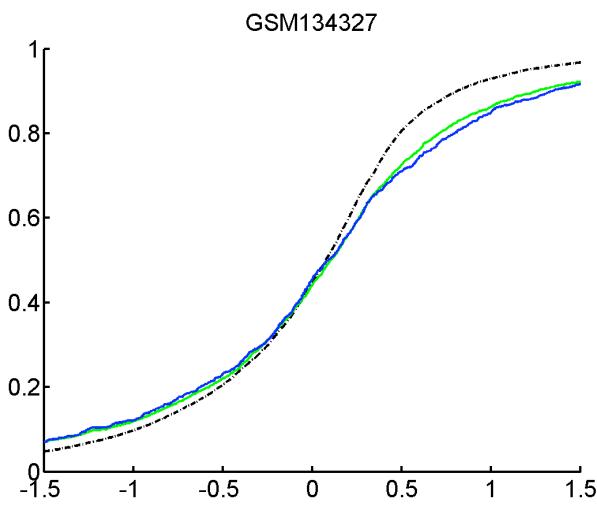
Experiment: GSM134325

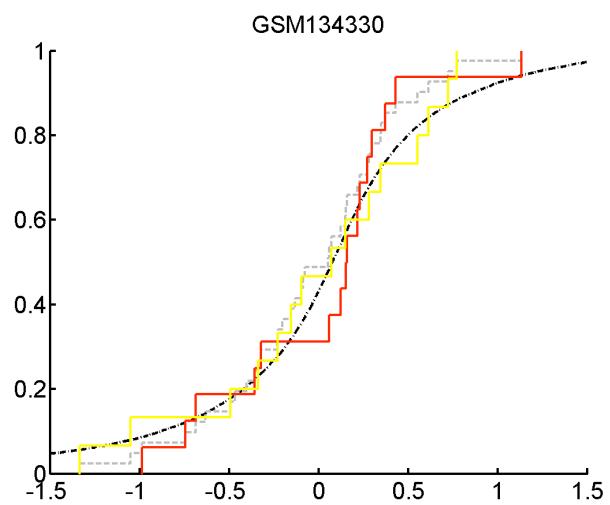
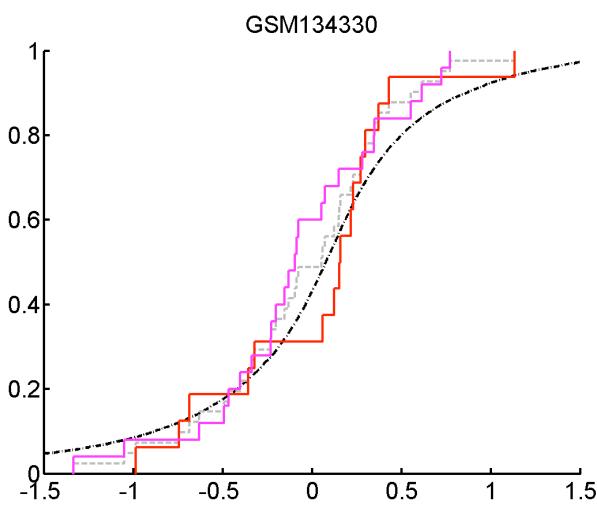
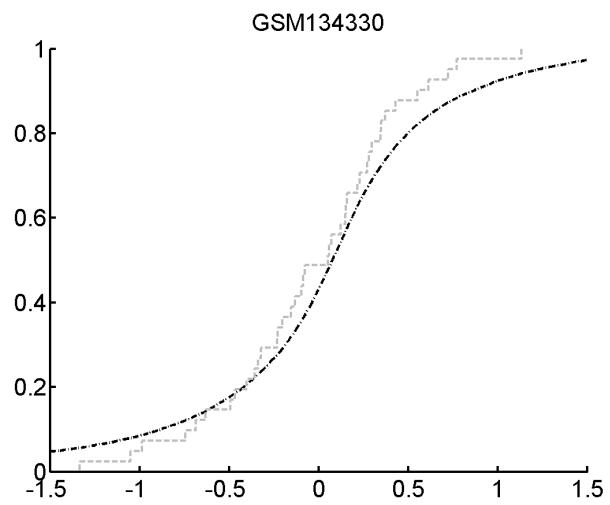
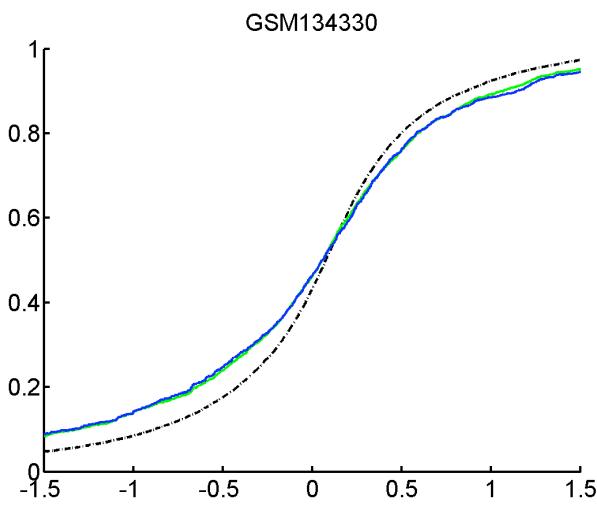
mi/siRNA: VHL-2651



Experiment: GSM134327

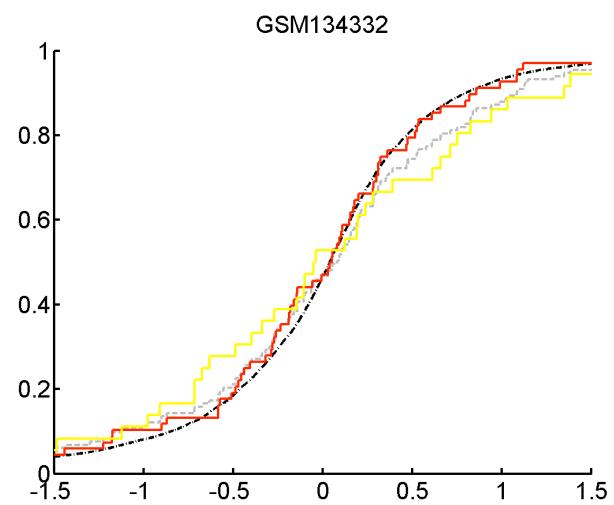
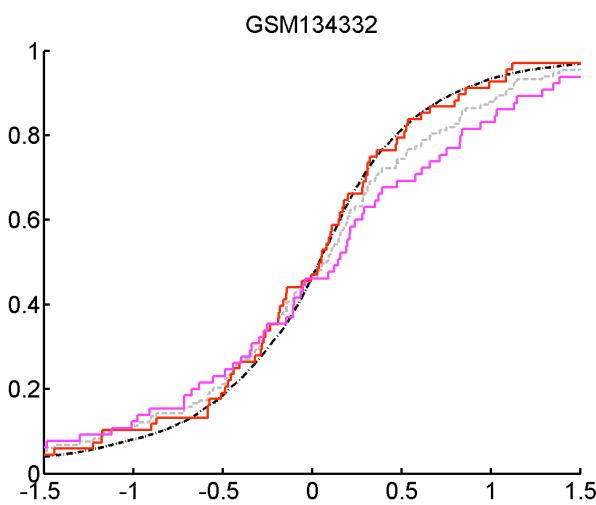
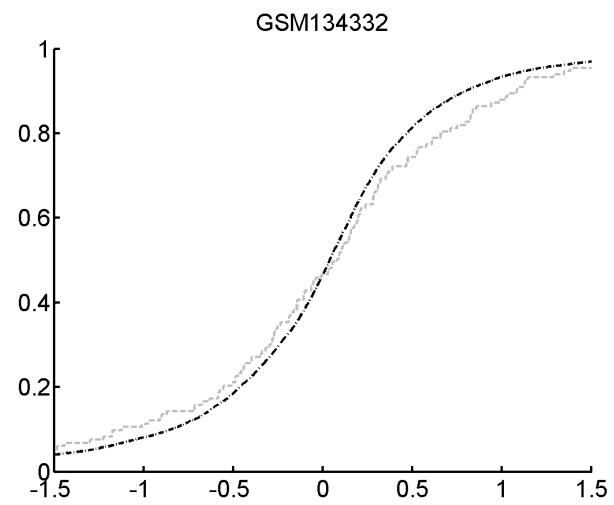
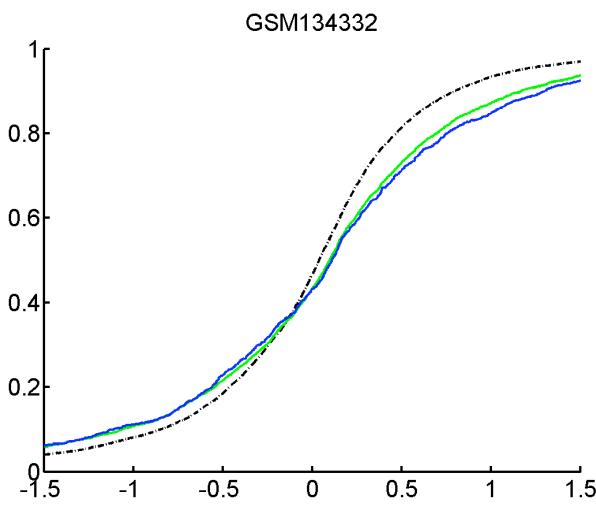
mi/siRNA: VHL-2652





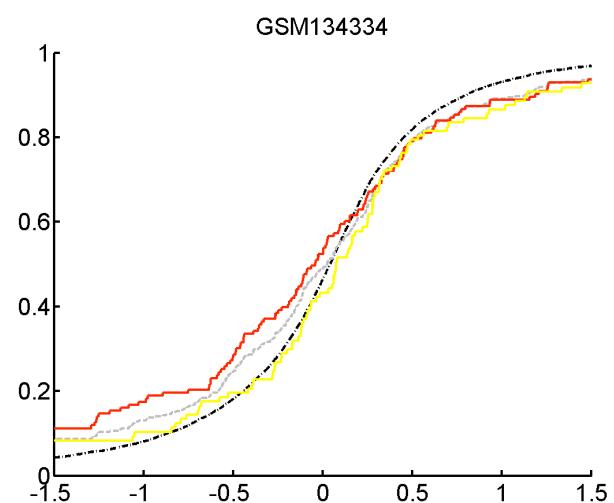
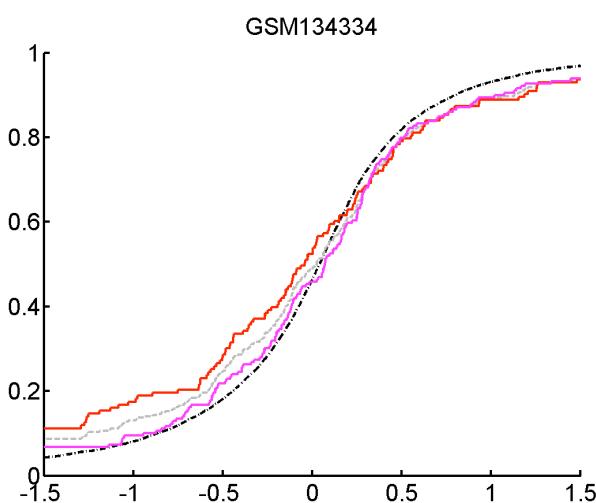
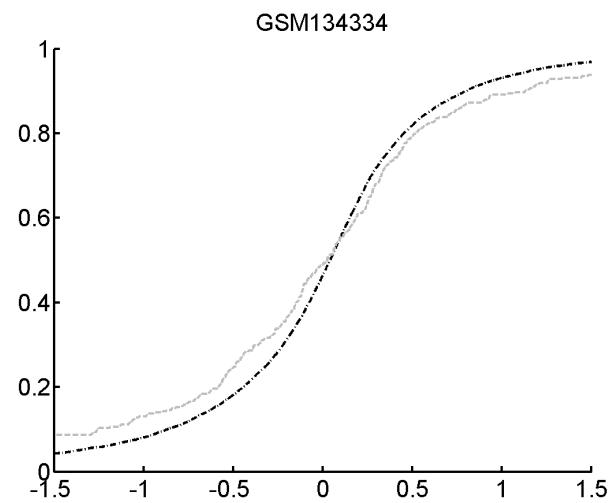
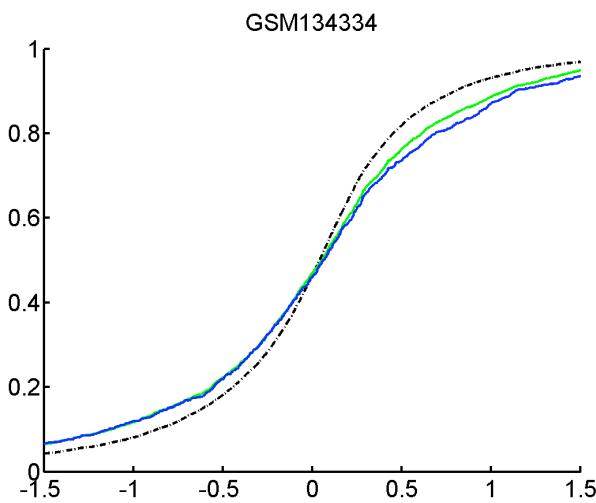
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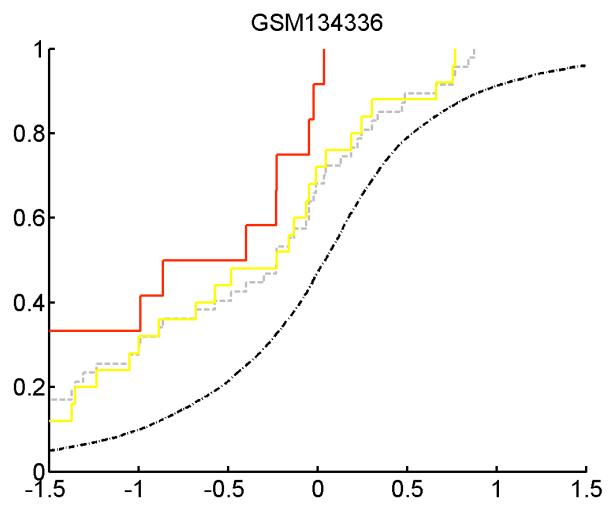
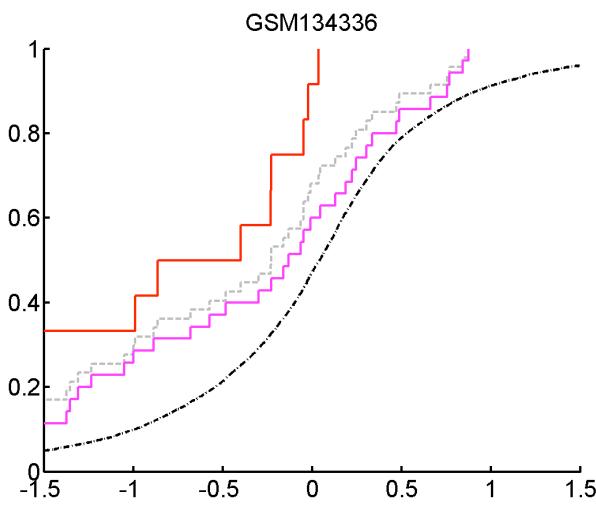
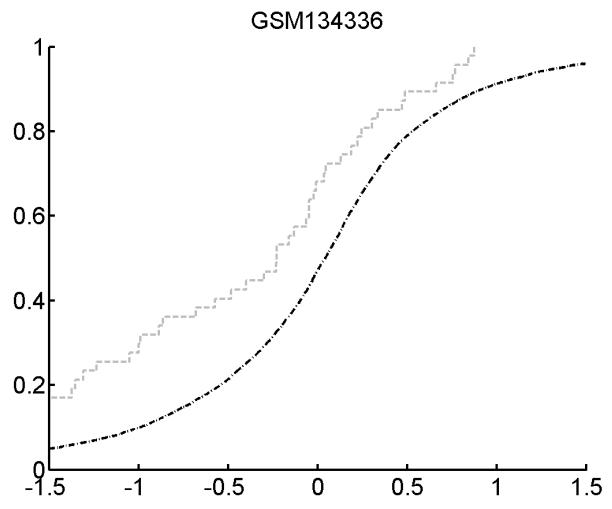
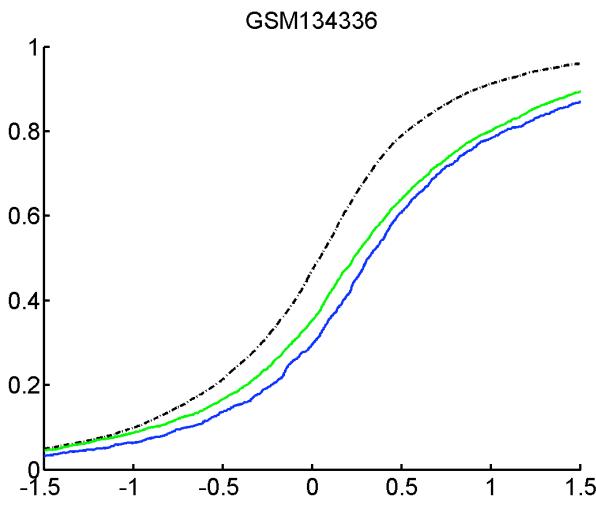
mi/siRNA: SOS1-1582



Experiment: GSM134334

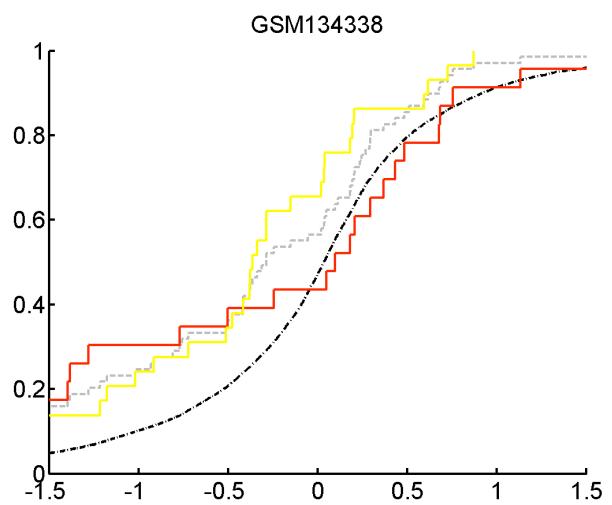
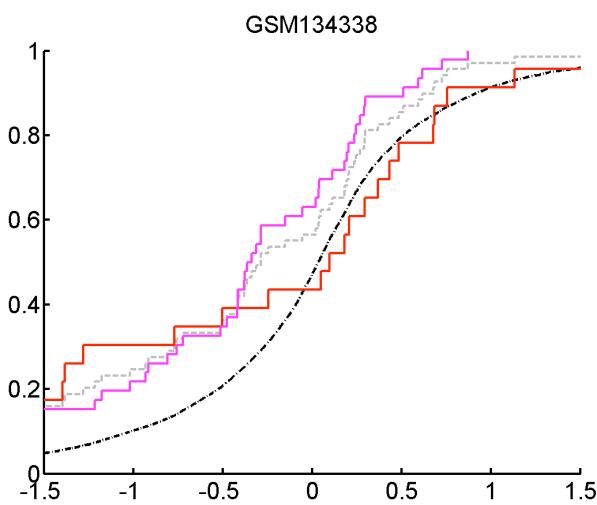
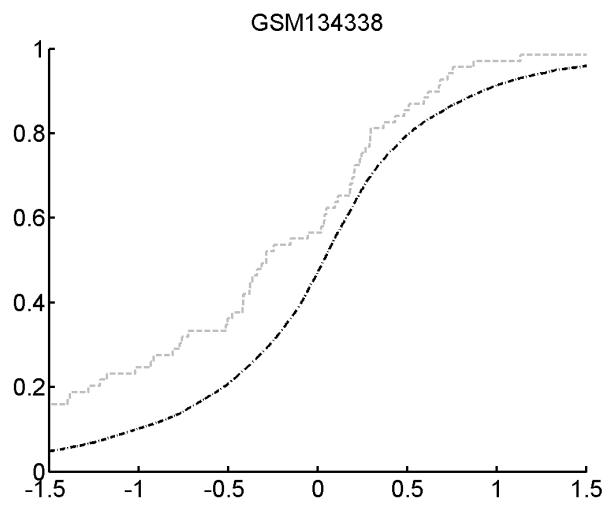
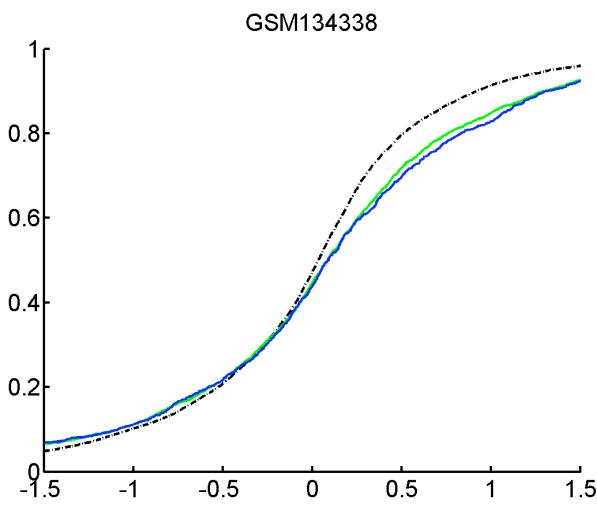
mi/siRNA: PRKCE-1295

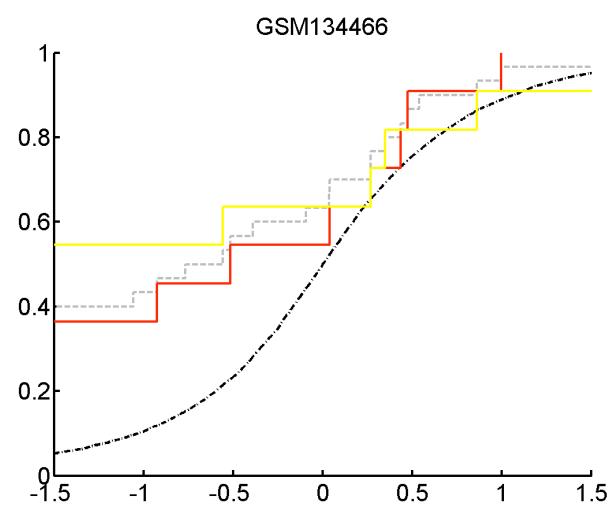
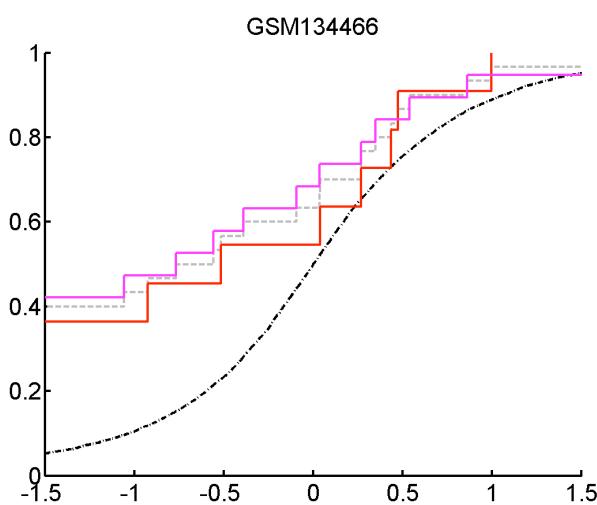
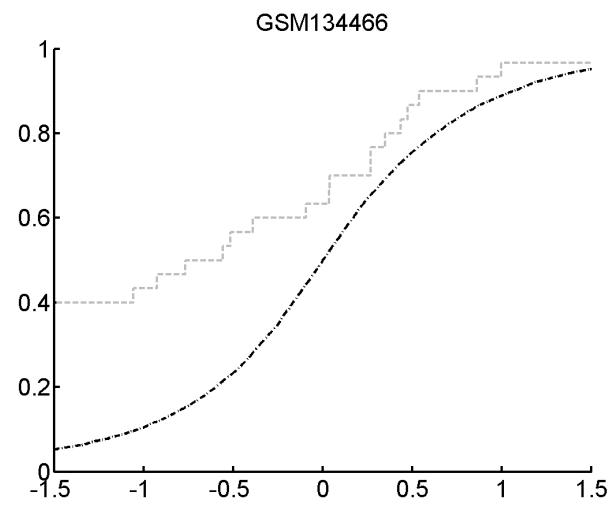
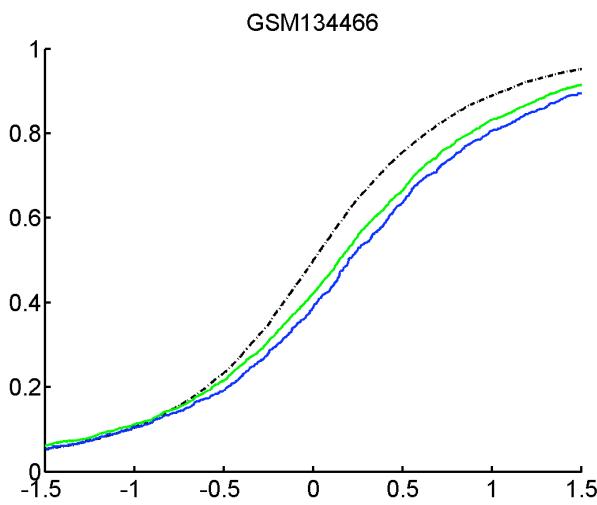




Experiment: GSM134338

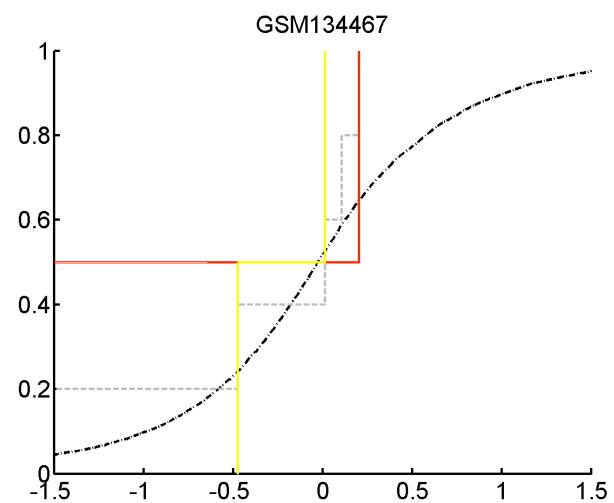
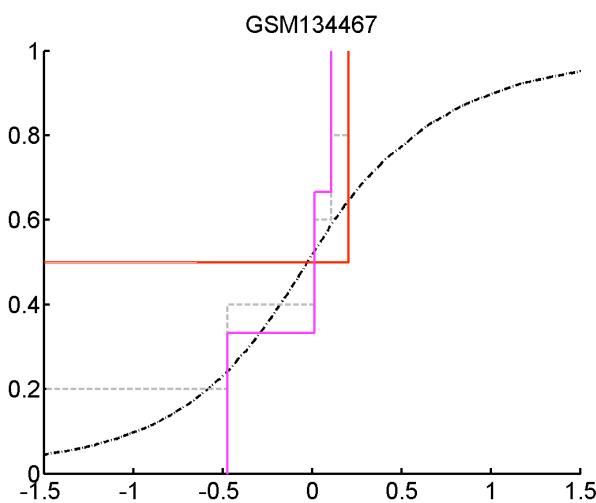
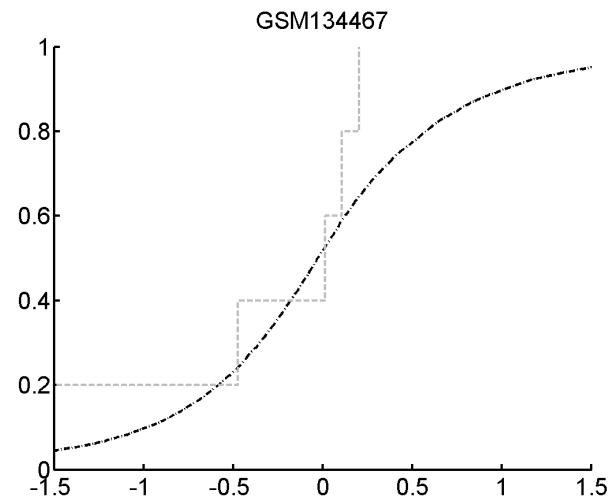
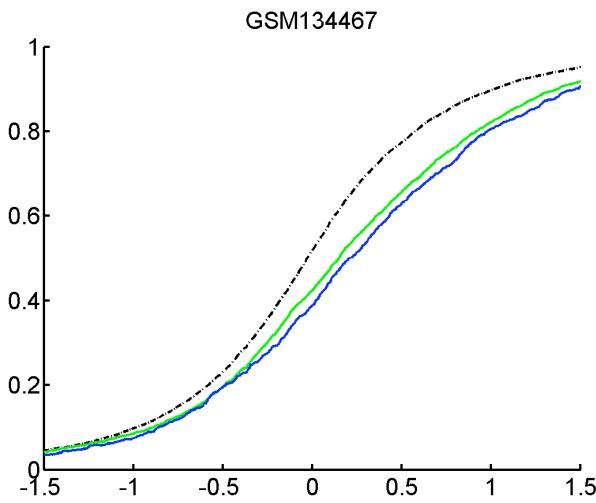
mi/siRNA: VHL-2652

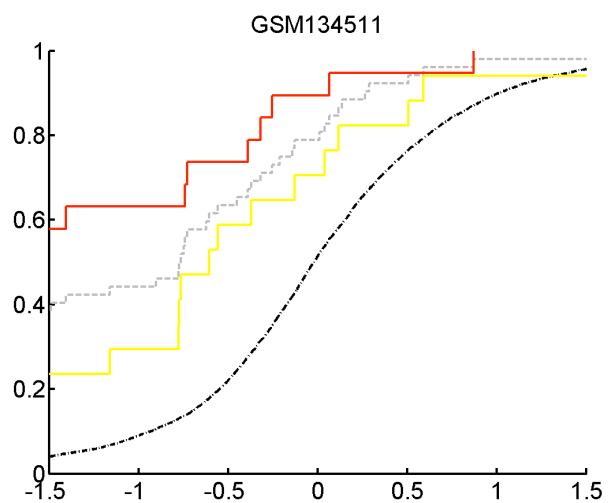
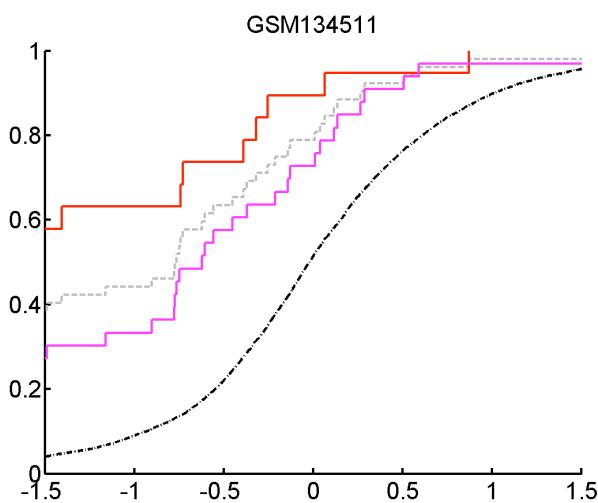
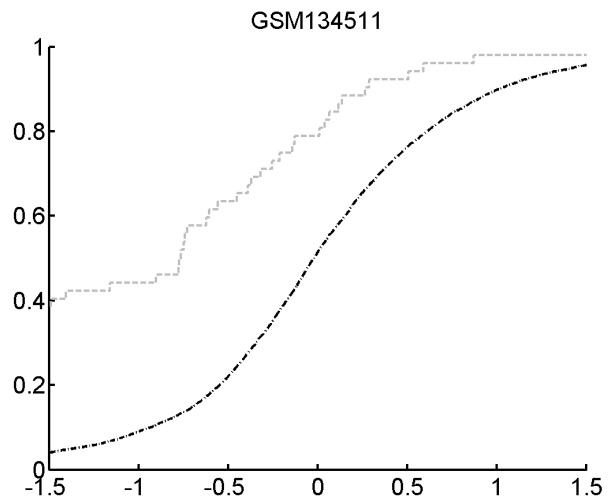
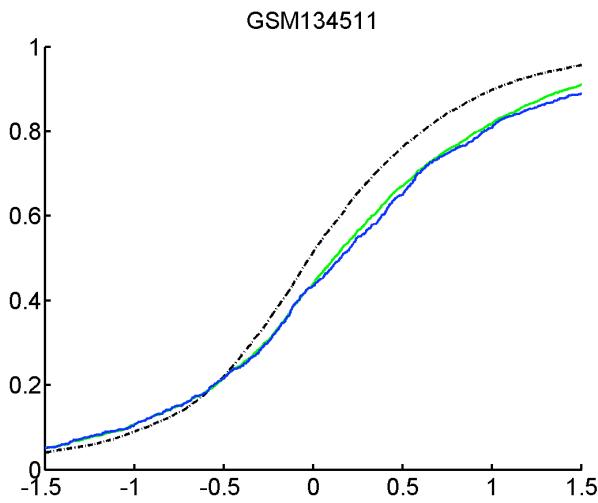


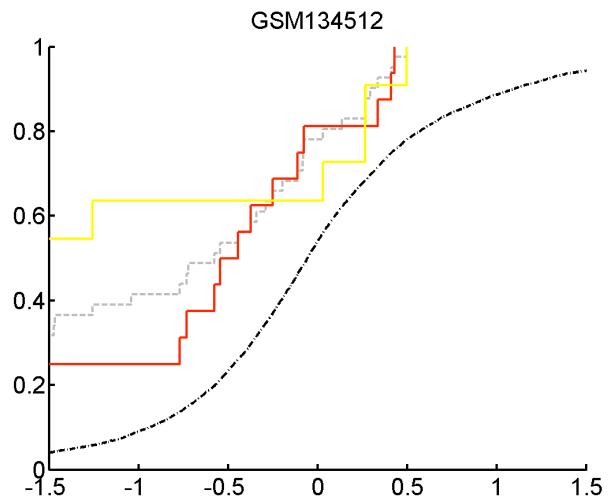
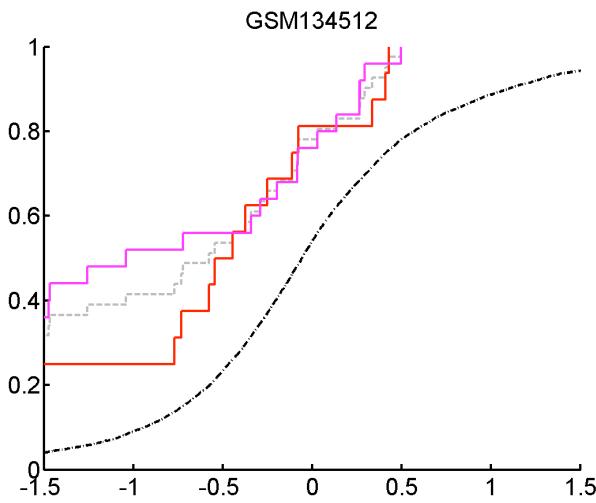
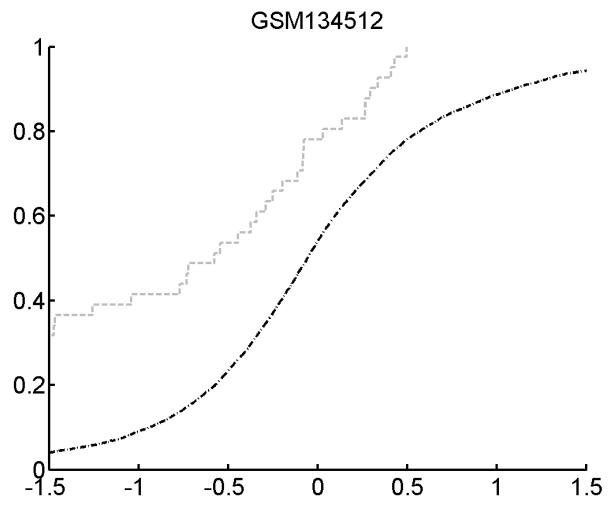
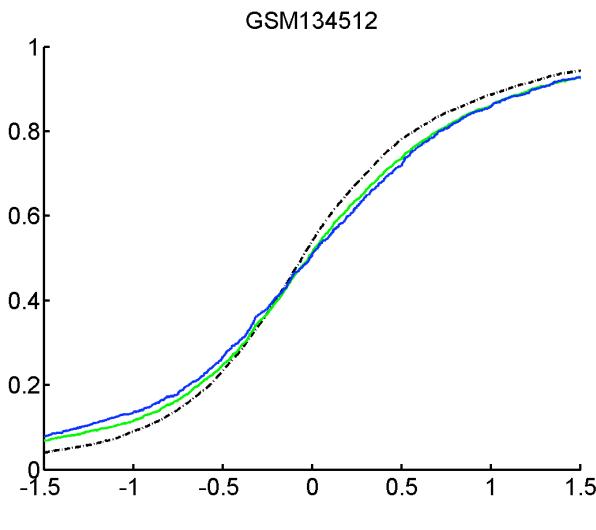


Experiment: GSM134467

mi/siRNA: PLK772

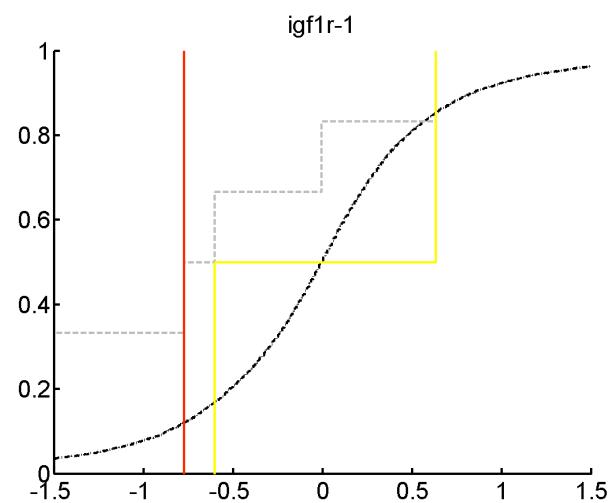
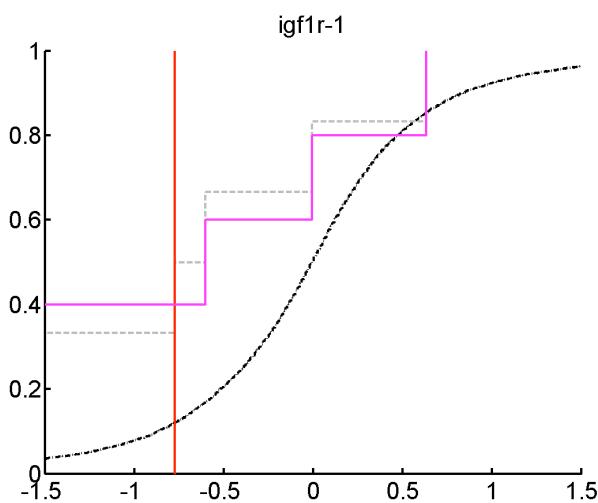
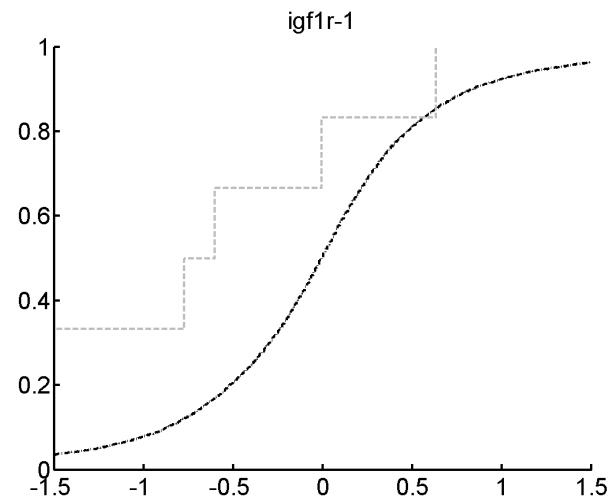
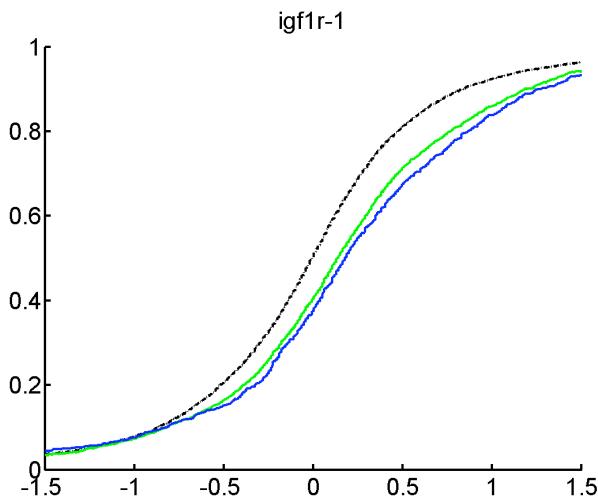






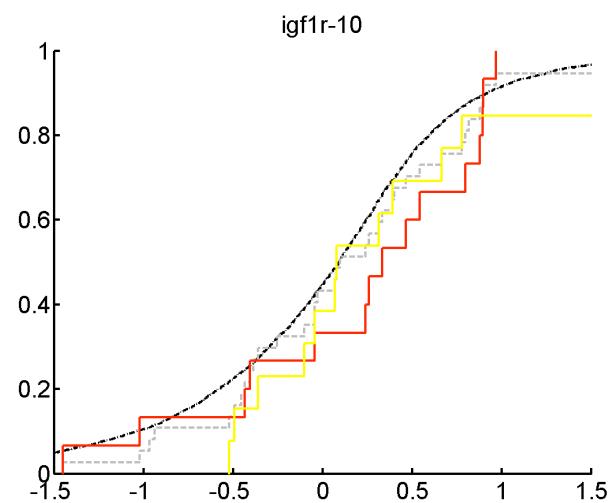
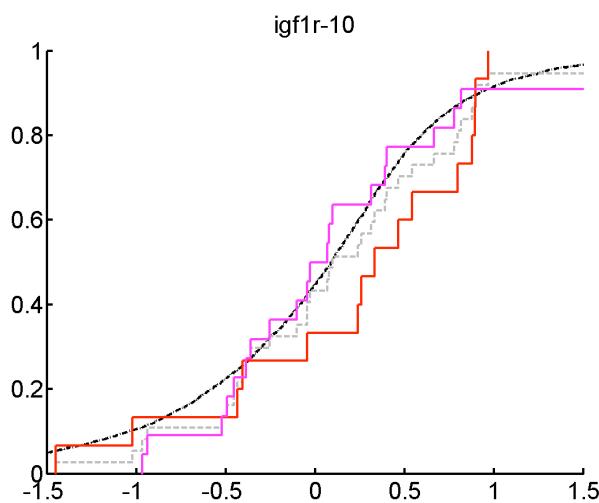
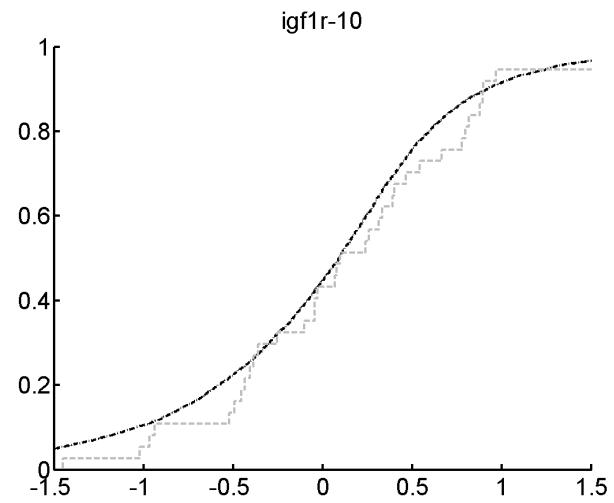
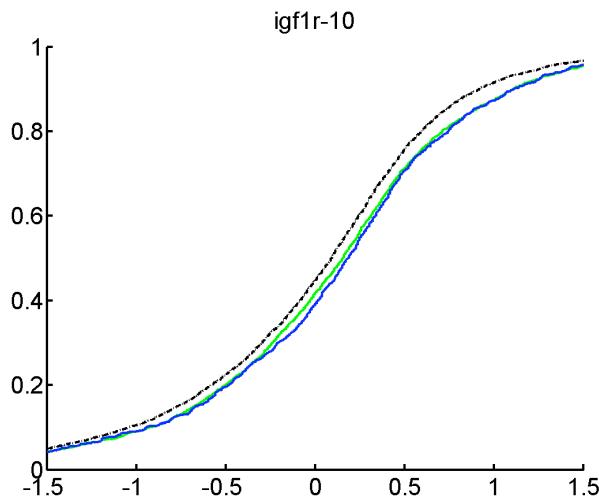
Experiment: igf1r-1

mi/siRNA: IGF1R-1



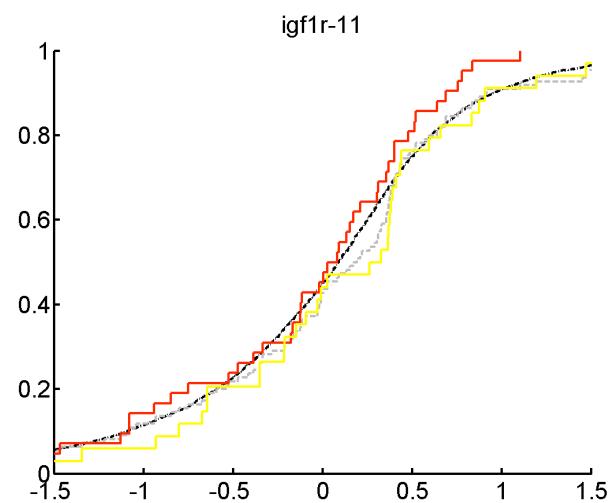
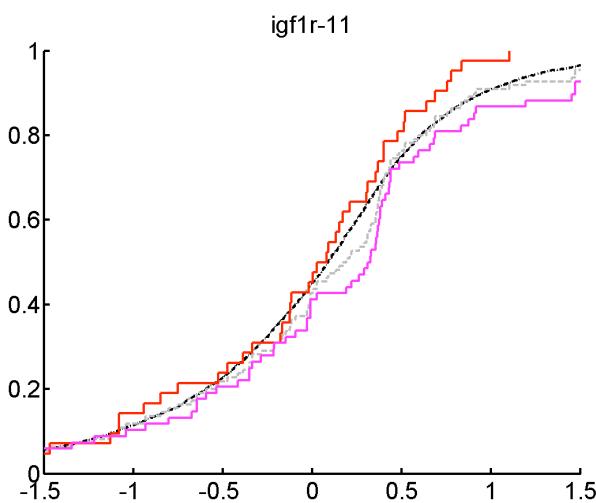
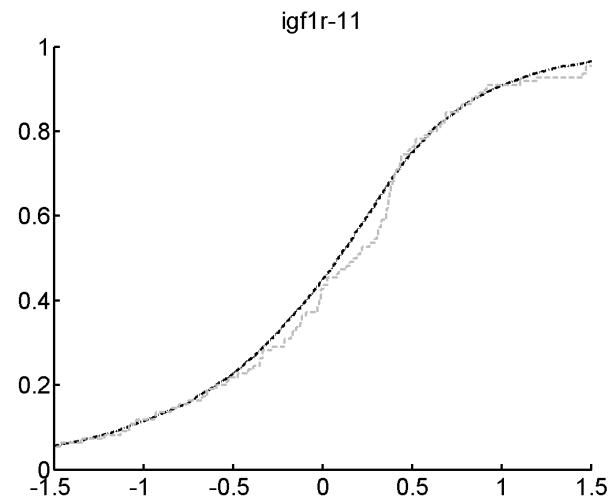
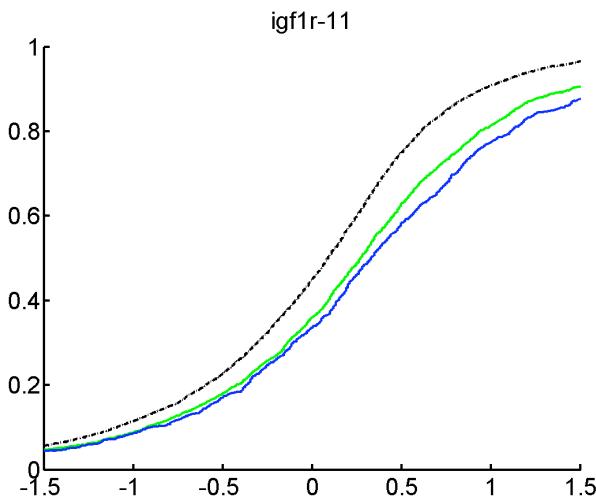
Experiment: igf1r-10

mi/siRNA: IGF1R-10



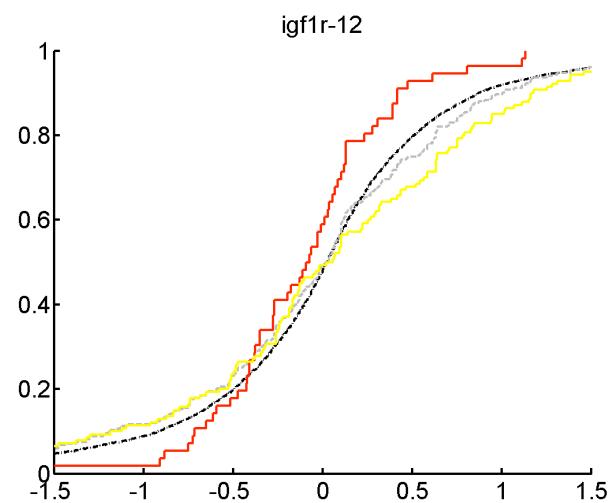
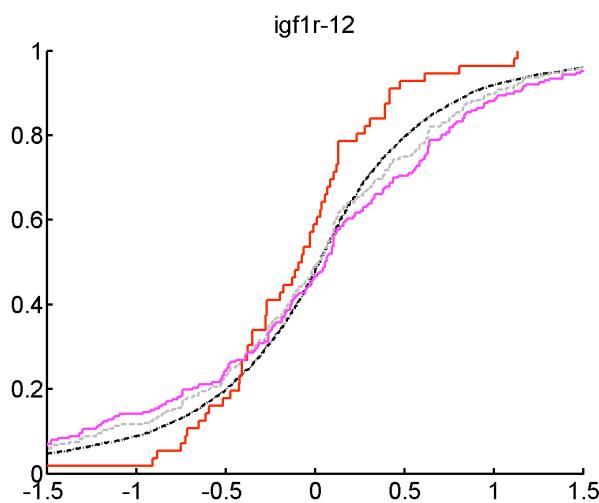
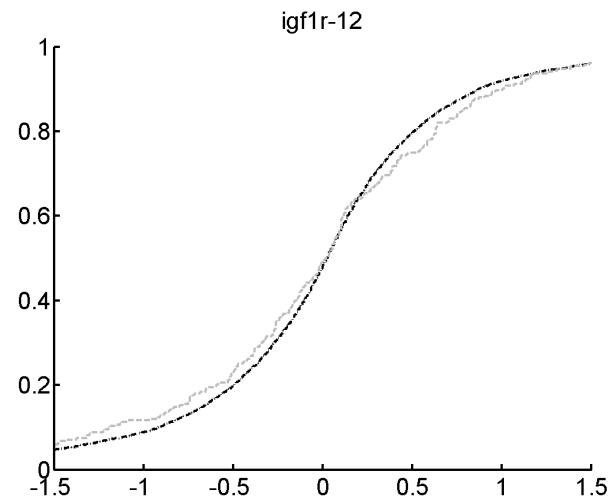
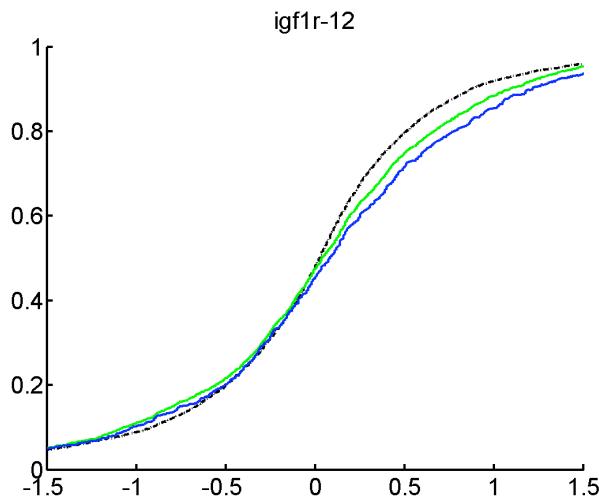
Experiment: igf1r-11

mi/siRNA: IGF1R-11



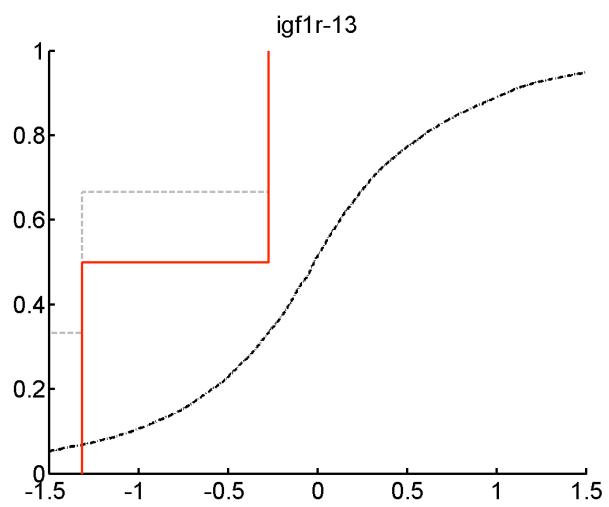
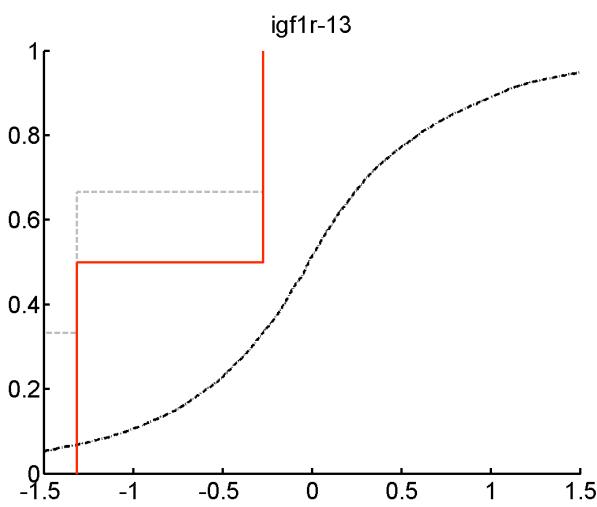
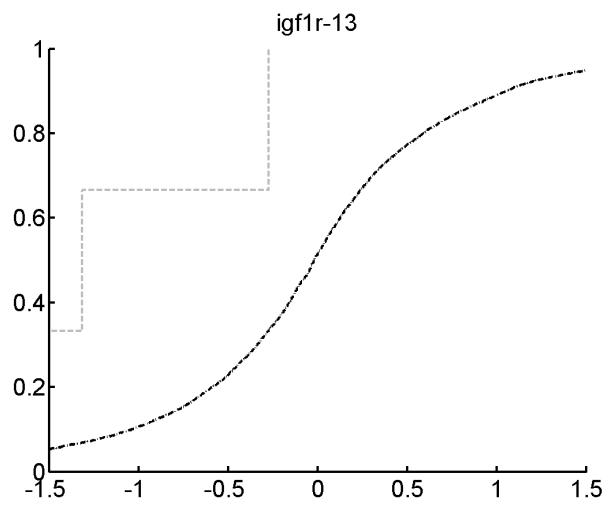
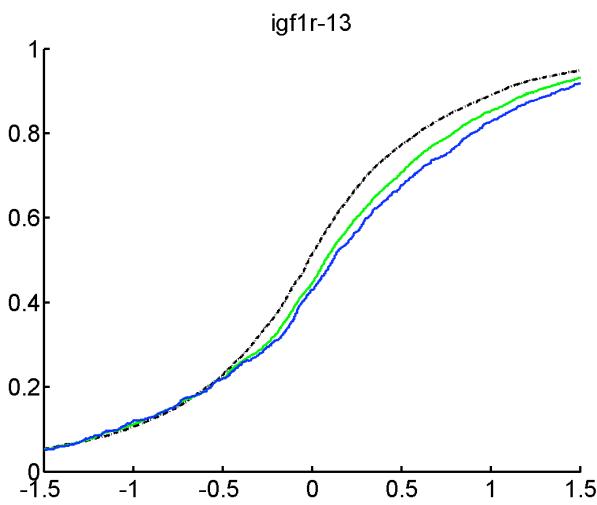
Experiment: igf1r-12

mi/siRNA: IGF1R-12



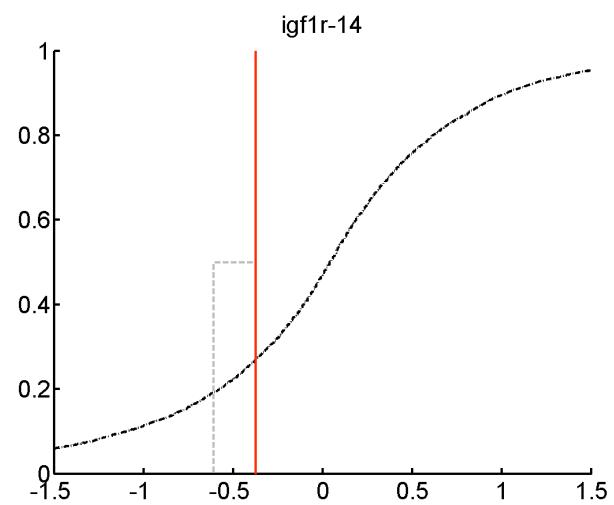
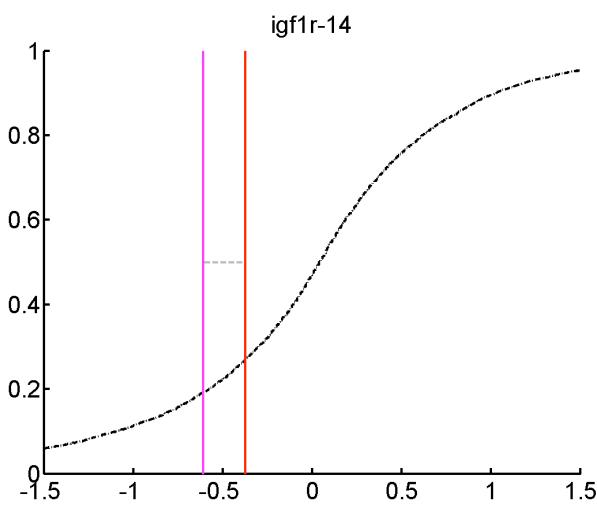
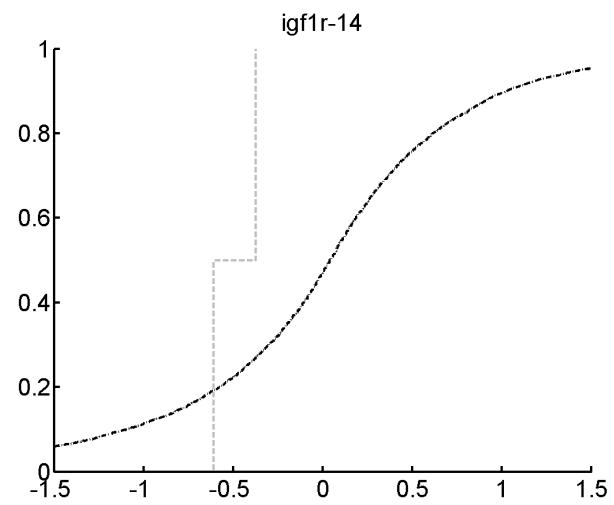
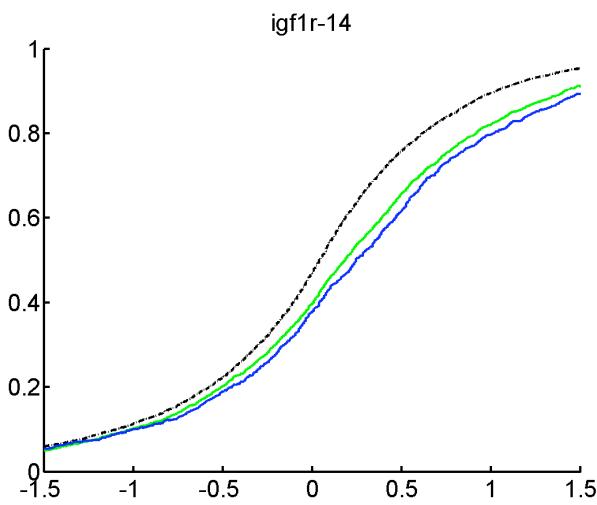
Experiment: igf1r-13

mi/siRNA: IGF1R-13



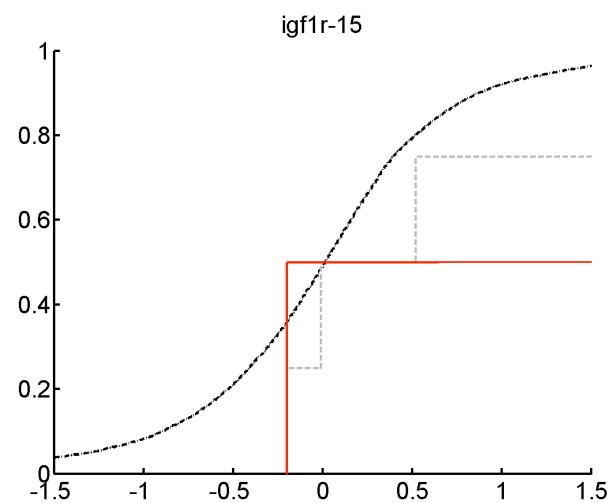
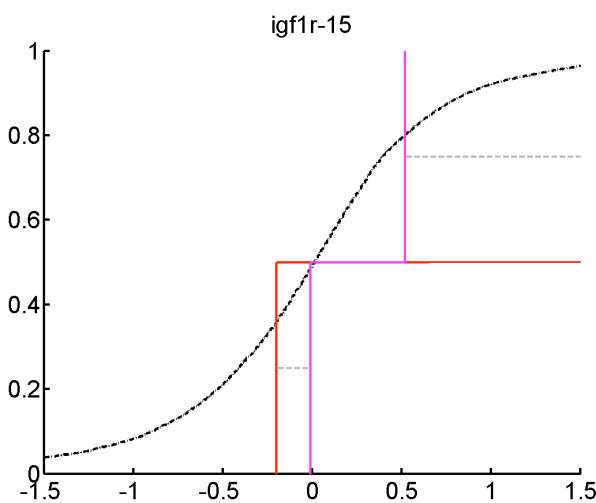
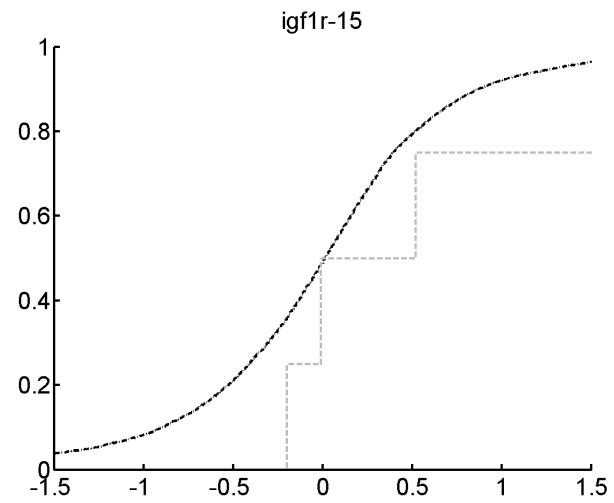
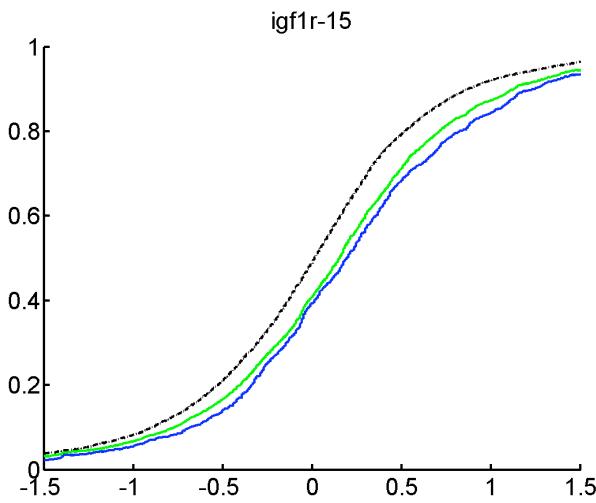
Experiment: igf1r-14

mi/siRNA: IGF1R-14



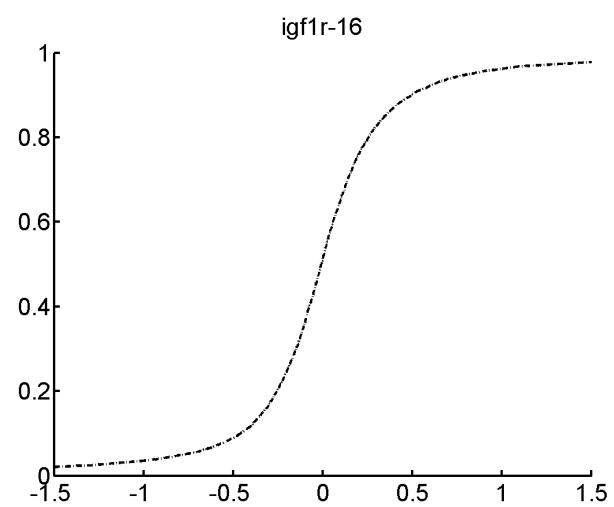
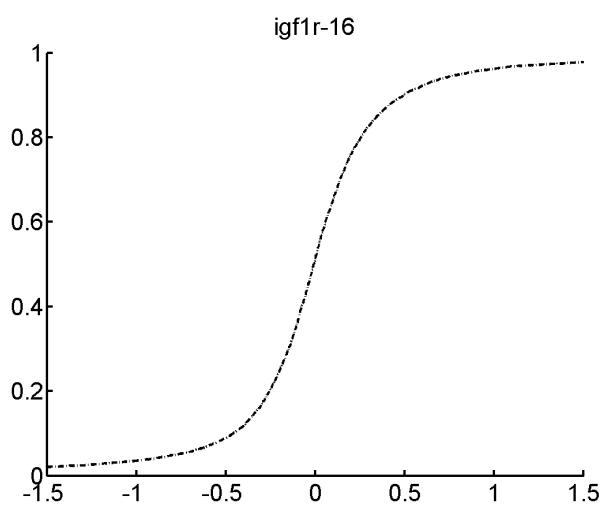
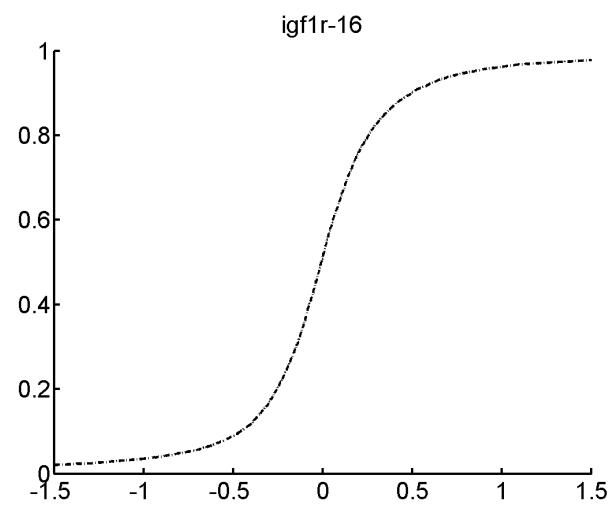
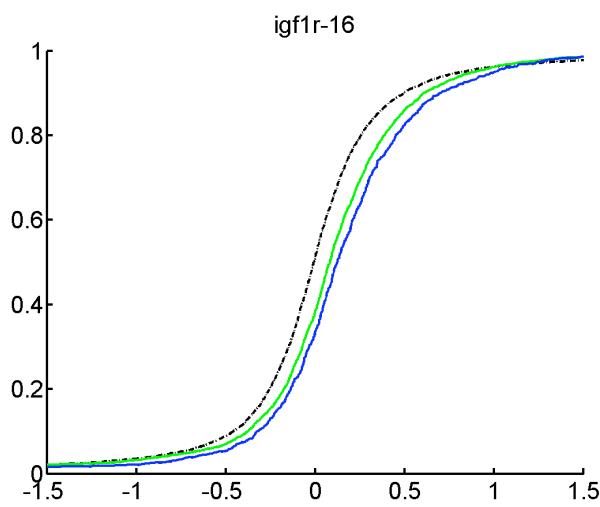
Experiment: igf1r-15

mi/siRNA: IGF1R-15



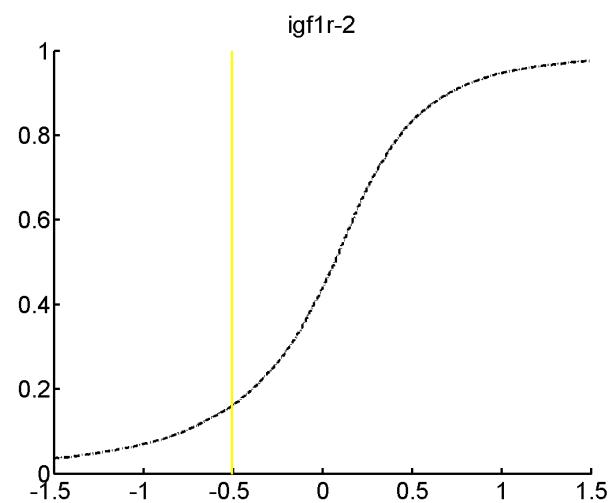
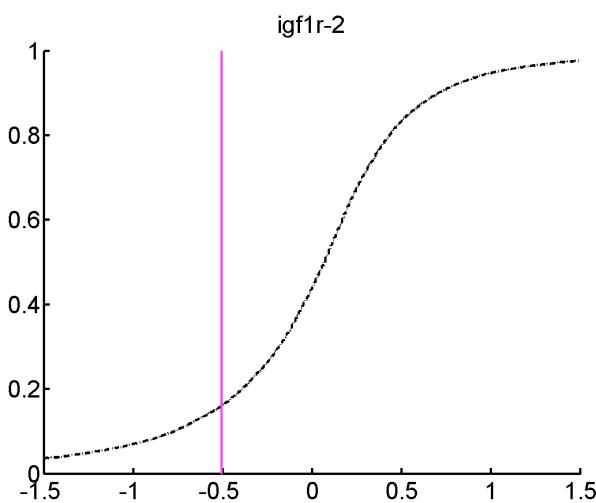
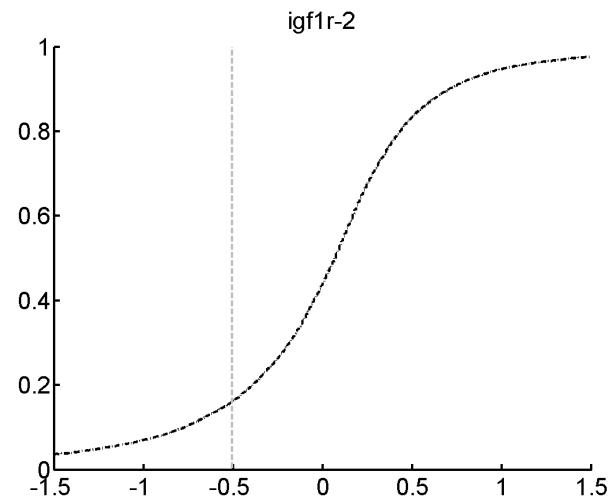
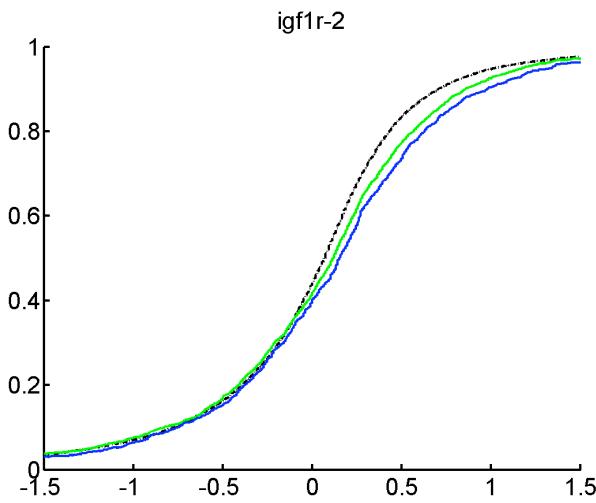
Experiment: igf1r-16

mi/siRNA: IGF1R-16



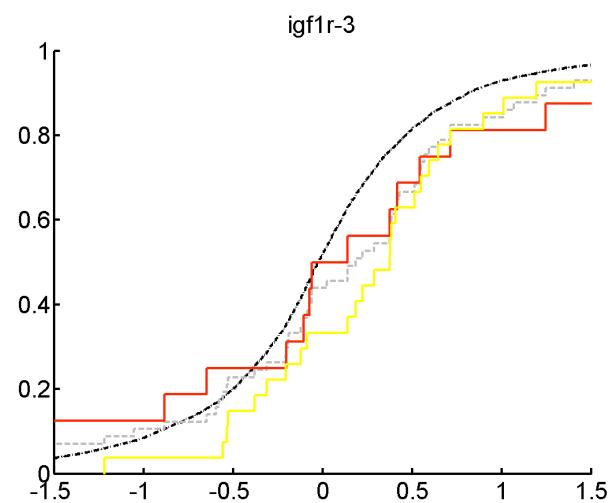
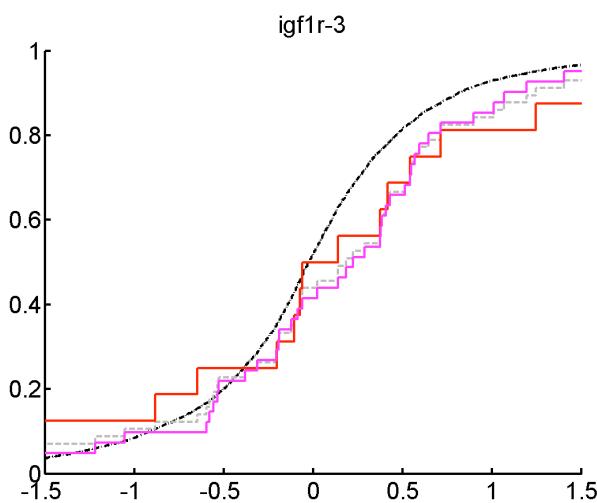
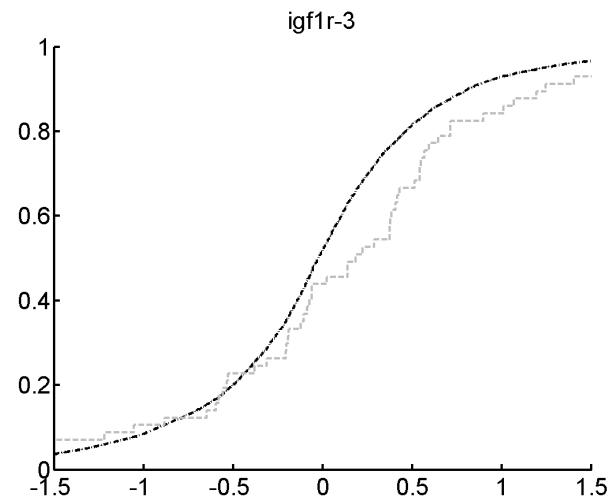
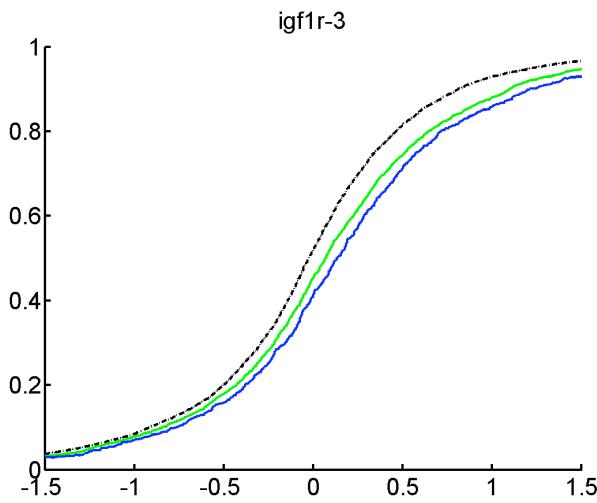
Experiment: igf1r-2

mi/siRNA: IGF1R-2



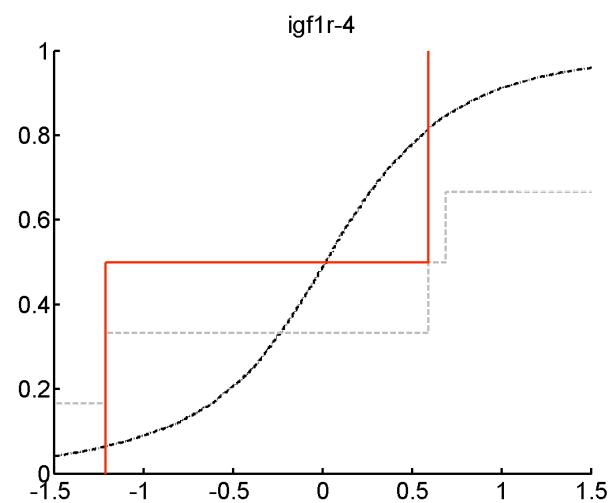
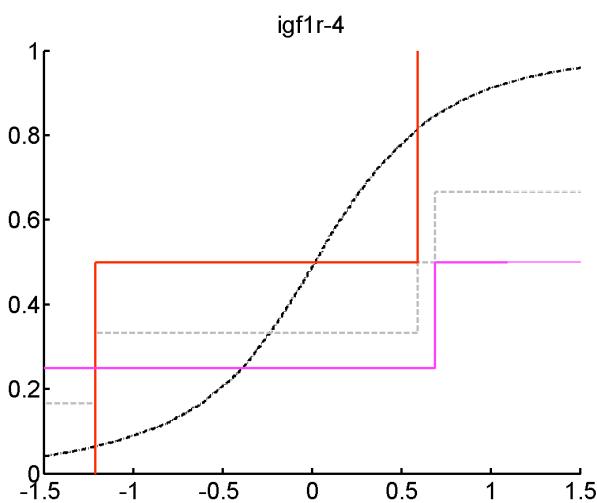
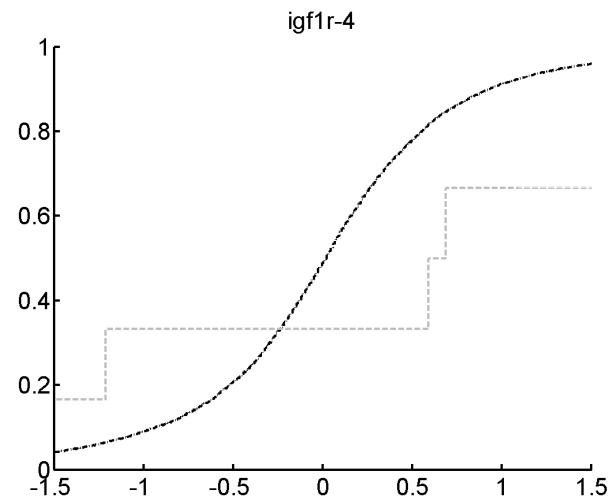
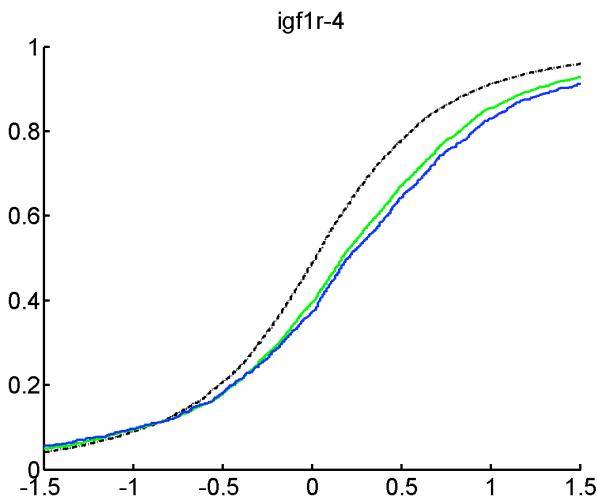
Experiment: igf1r-3

mi/siRNA: IGF1R-3



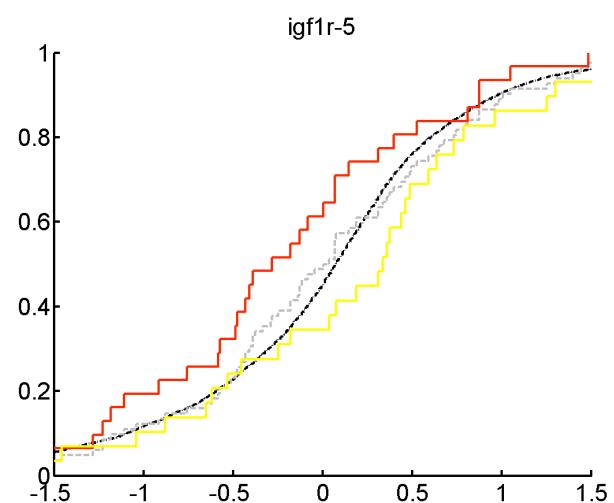
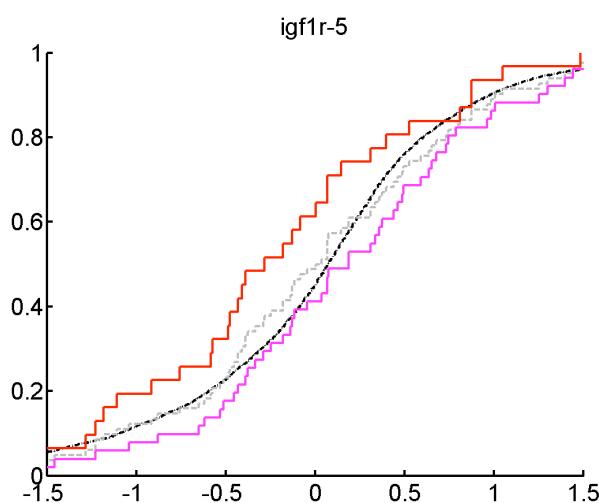
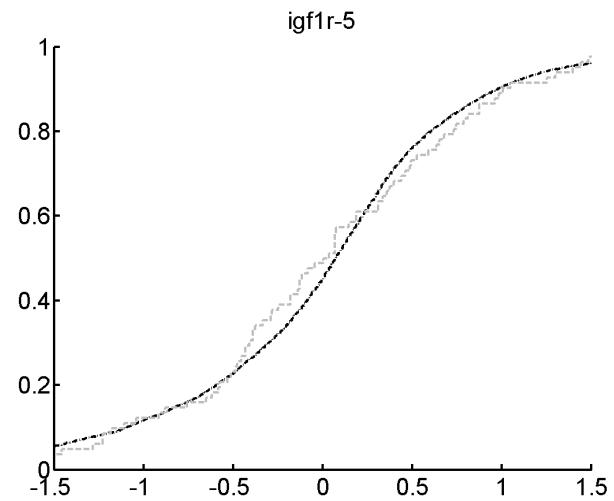
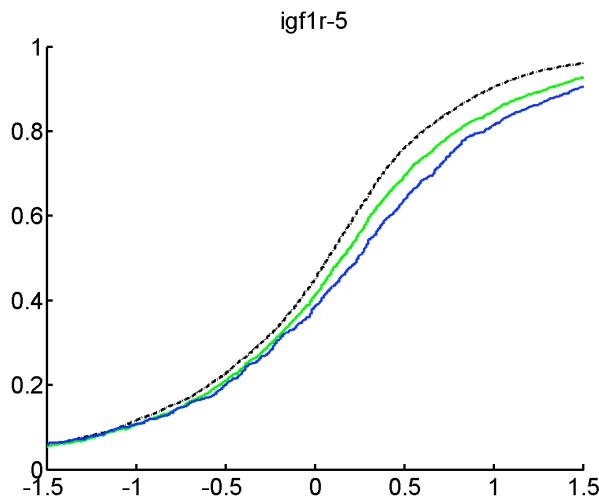
Experiment: igf1r-4

mi/siRNA: IGF1R-4



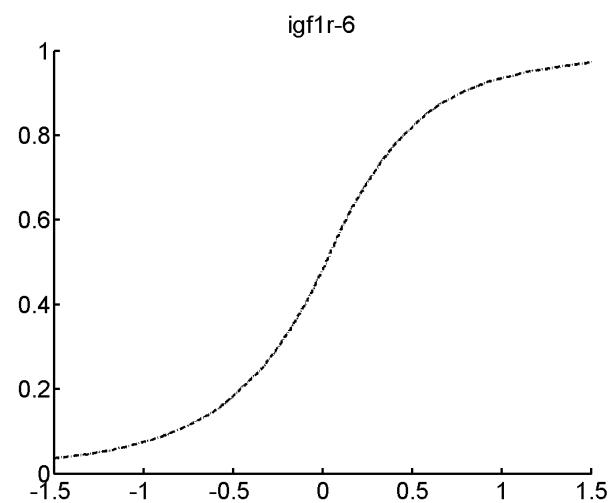
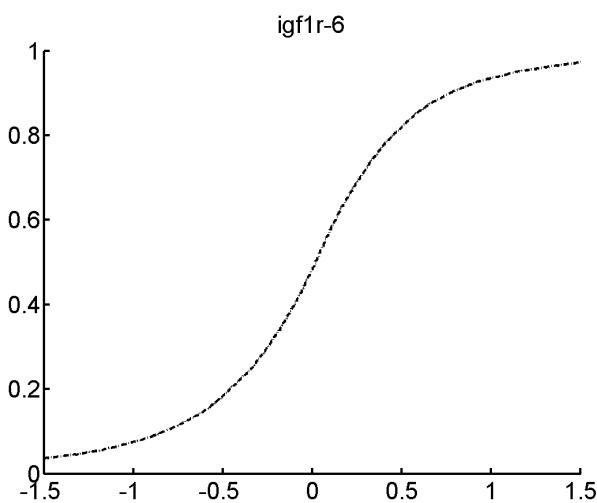
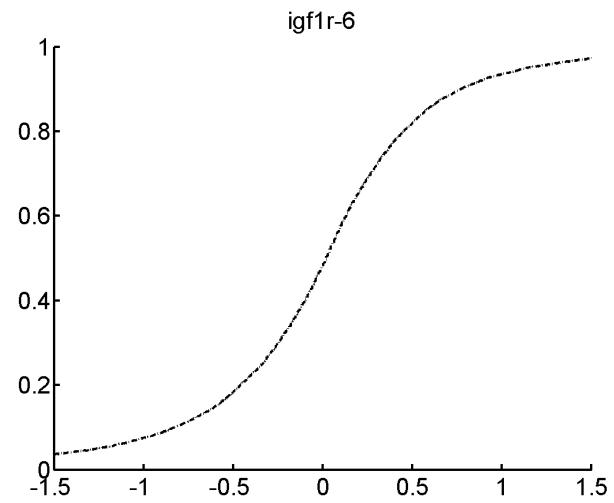
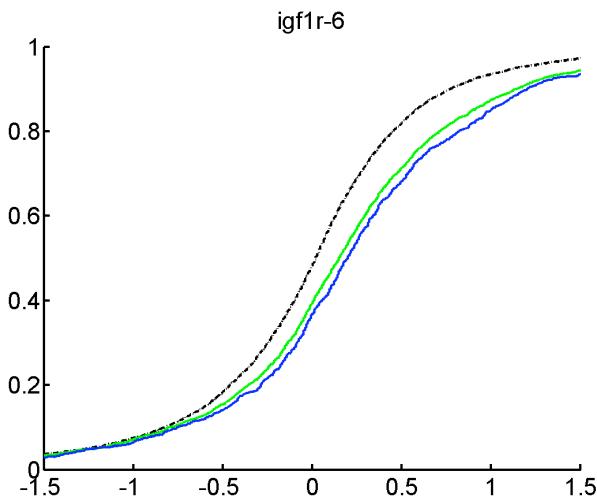
Experiment: igf1r-5

mi/siRNA: IGF1R-5



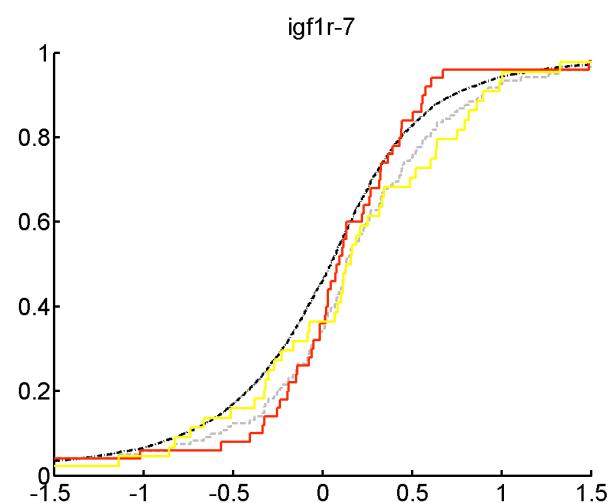
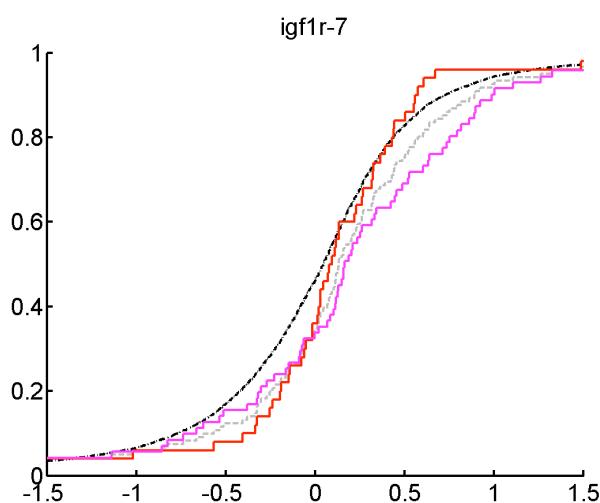
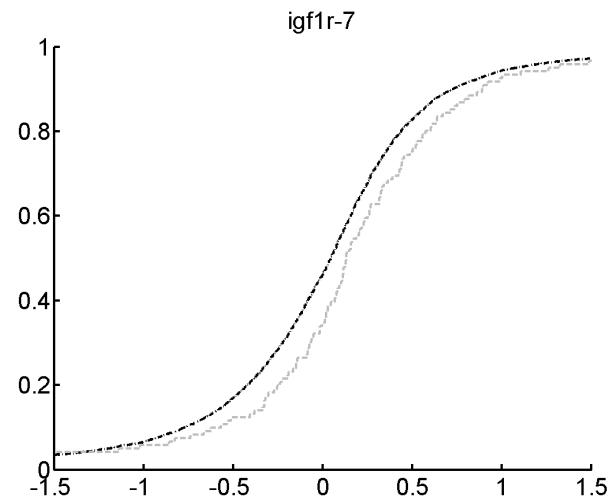
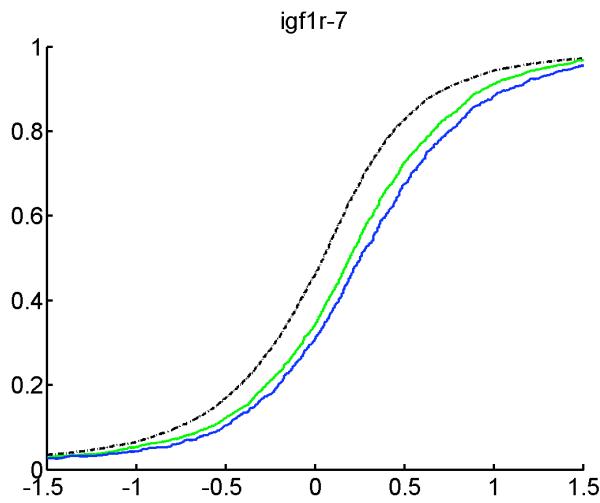
Experiment: igf1r-6

mi/siRNA: IGF1R-6



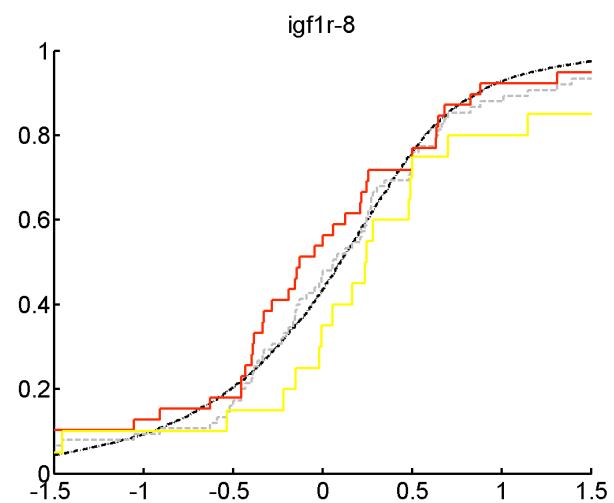
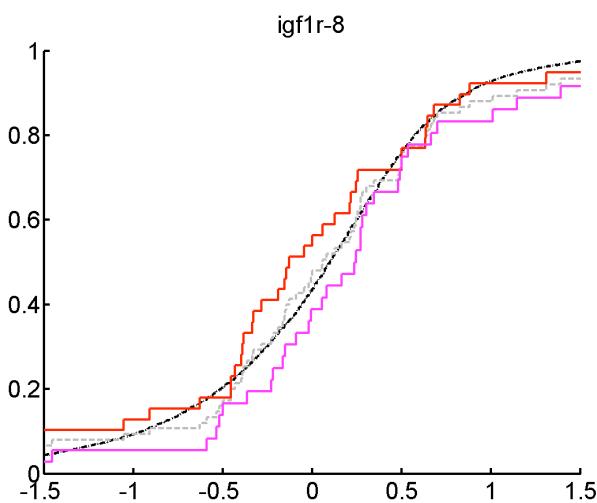
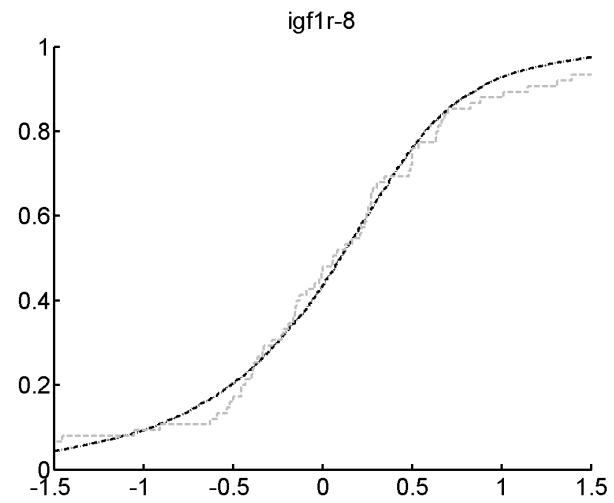
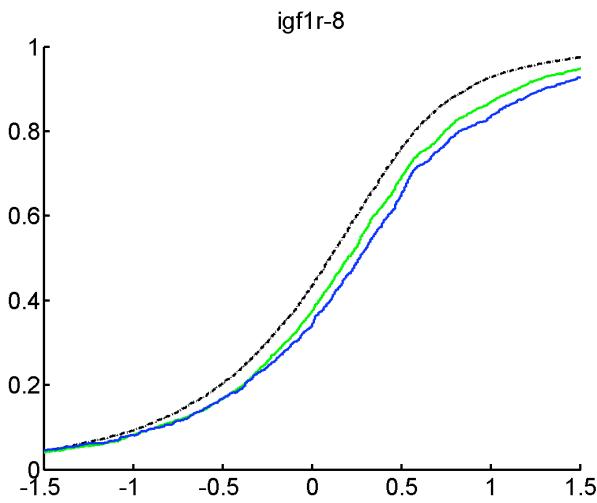
Experiment: igf1r-7

mi/siRNA: IGF1R-7



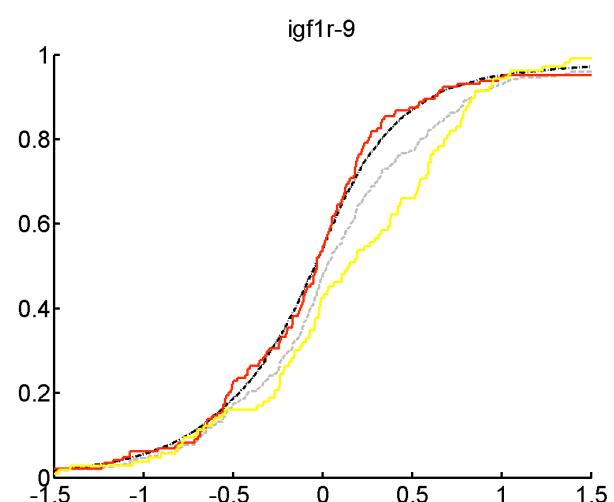
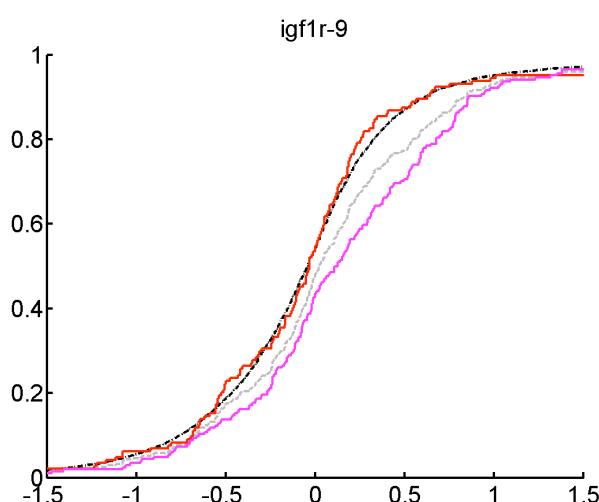
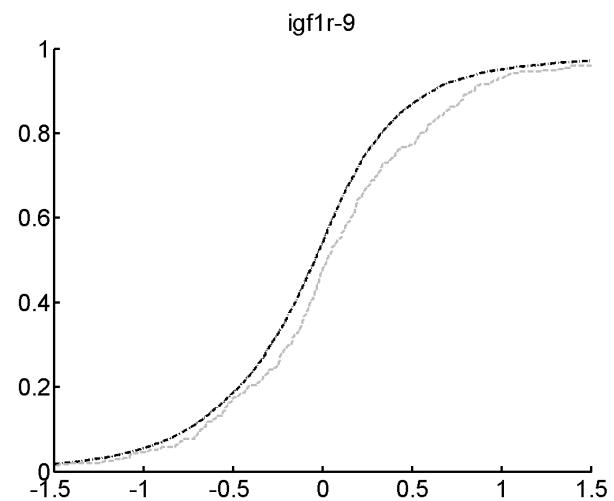
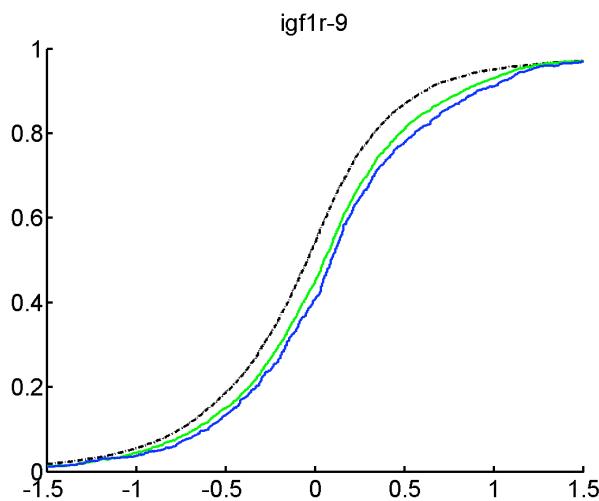
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mi/siRNA: IGF1R-8



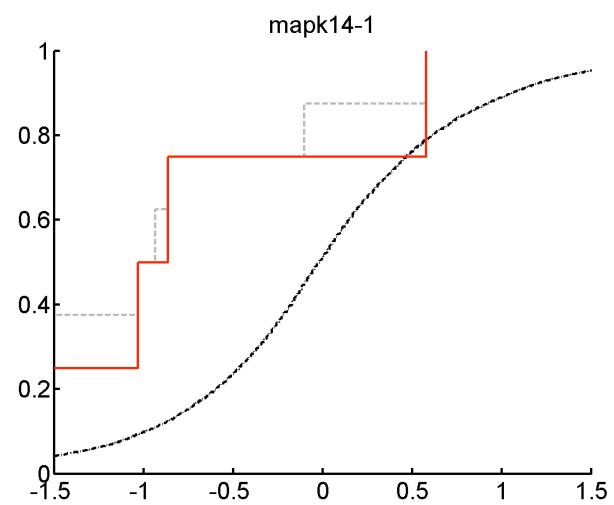
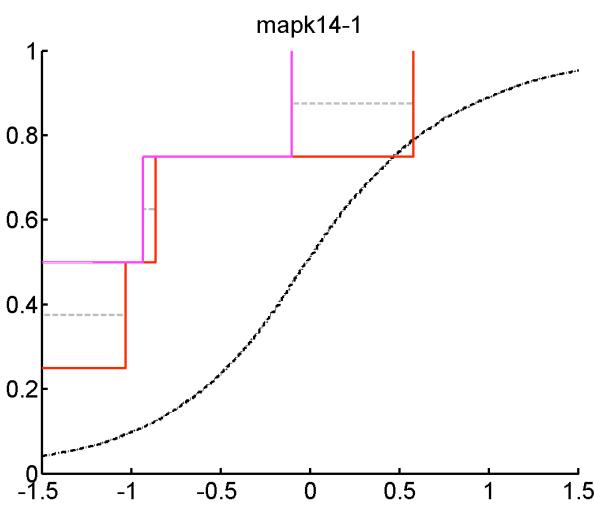
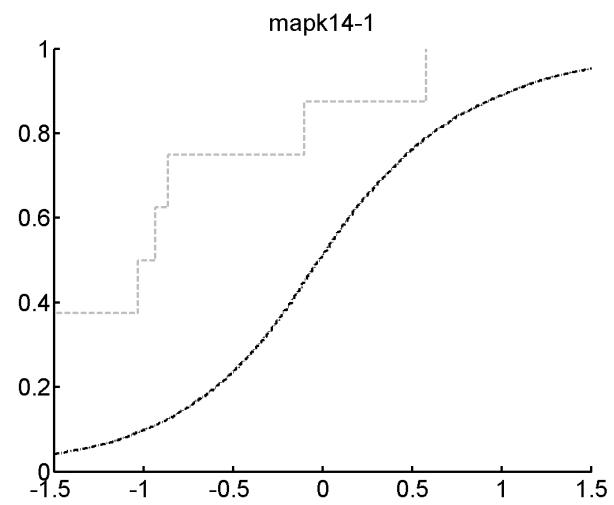
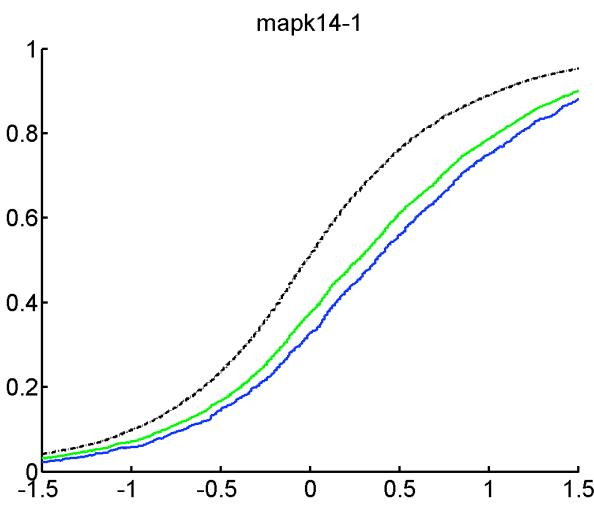
Experiment: igf1r-9

mi/siRNA: IGF1R-9



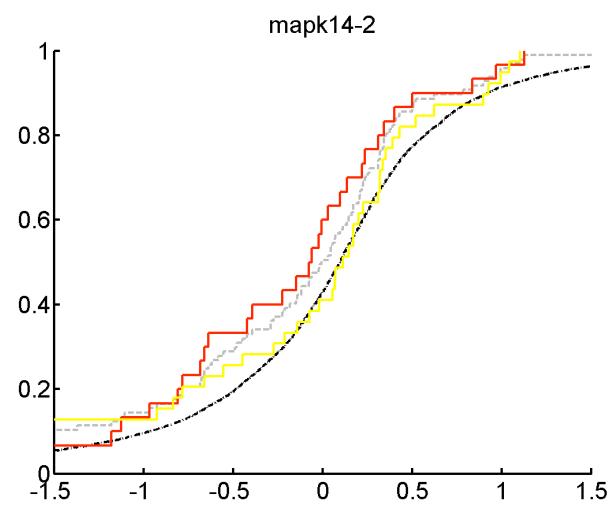
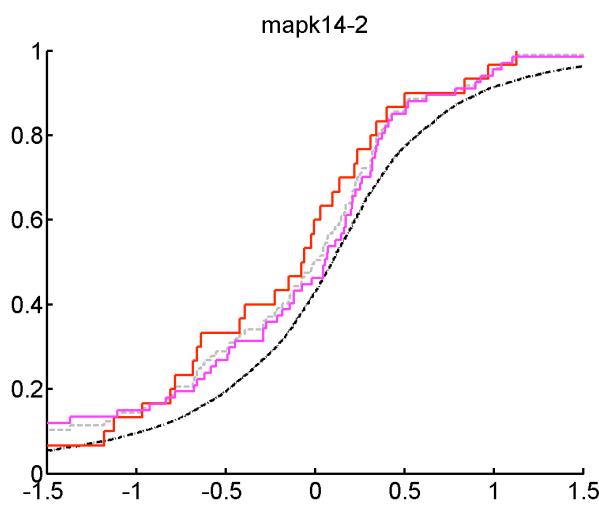
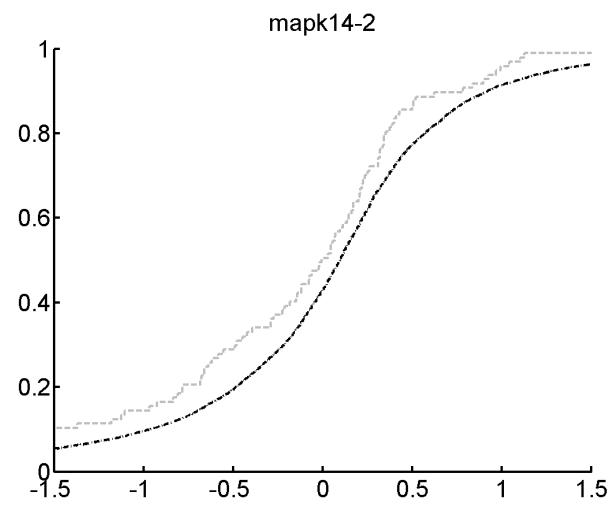
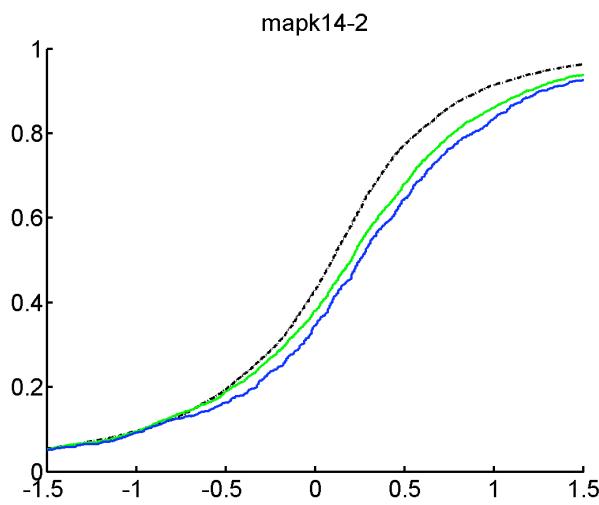
Experiment: mapk14-1

mi/siRNA: MAPK14-1



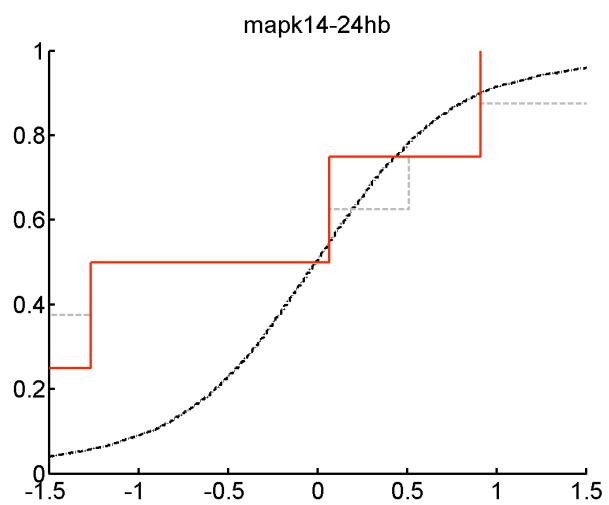
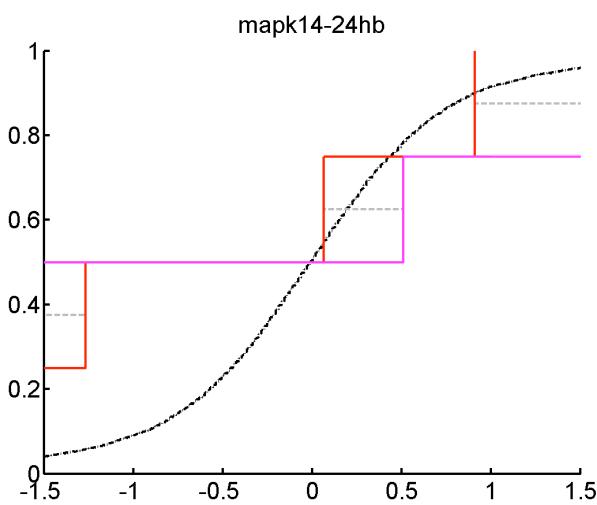
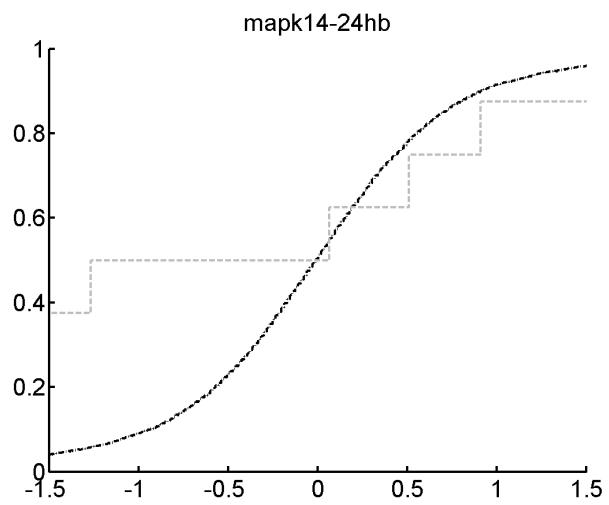
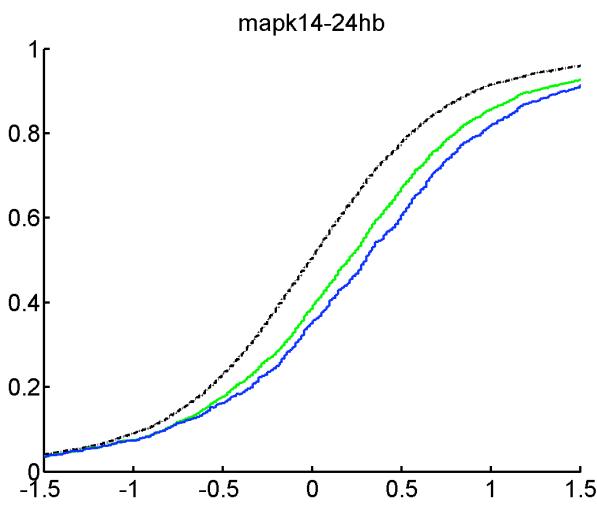
Experiment: mapk14-2

mi/siRNA: MAPK14-2



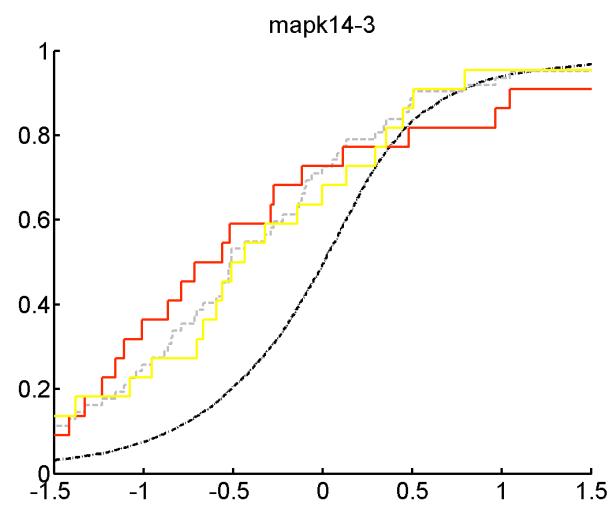
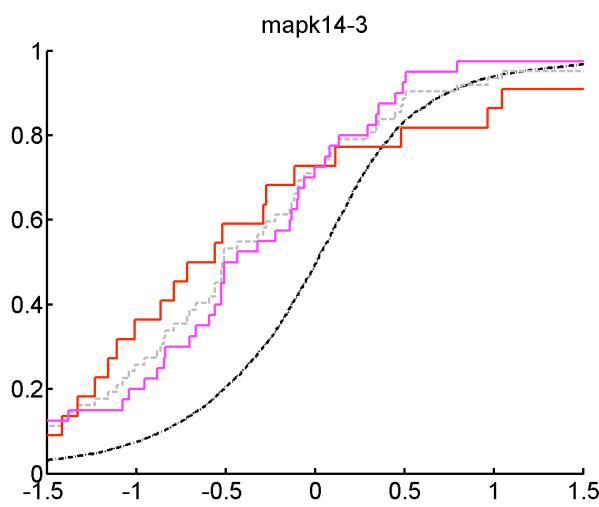
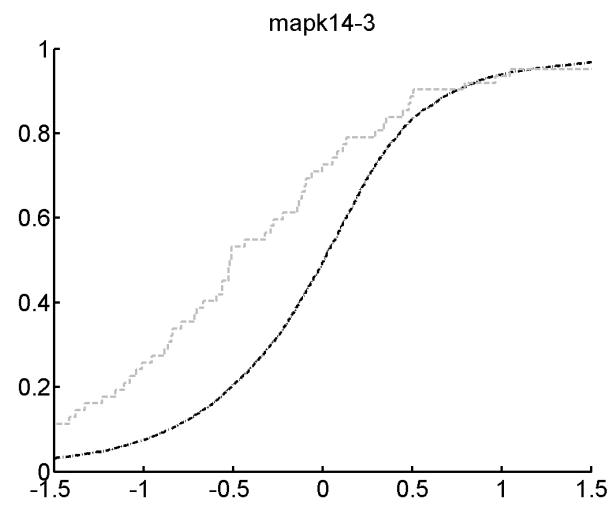
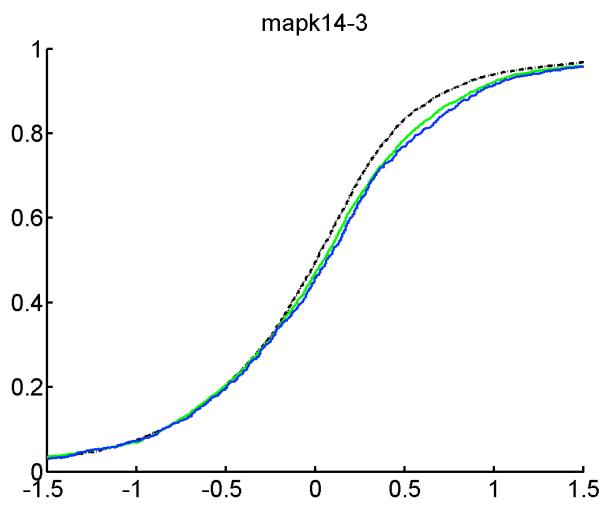
Experiment: mapk14-24hb

mi/siRNA: MAPK14-24hour



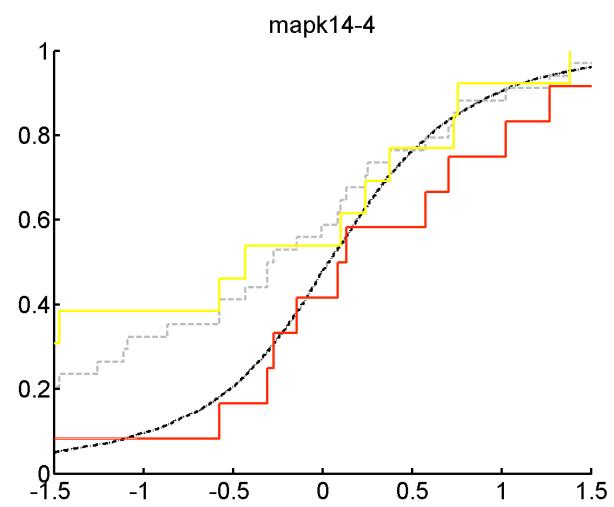
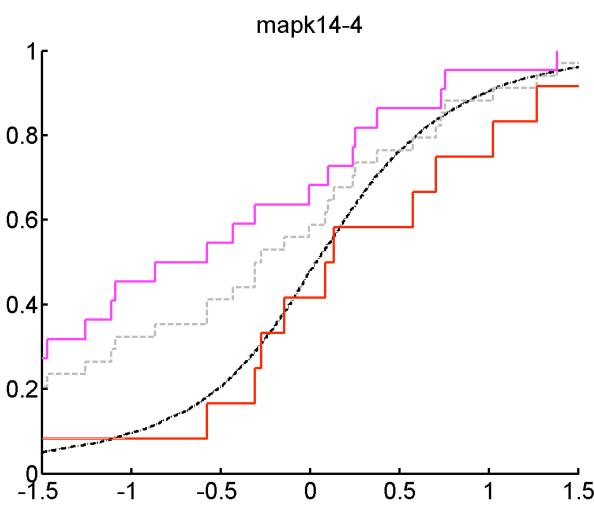
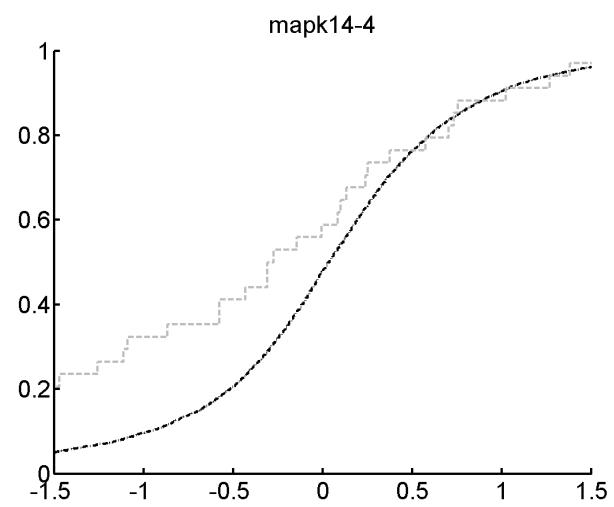
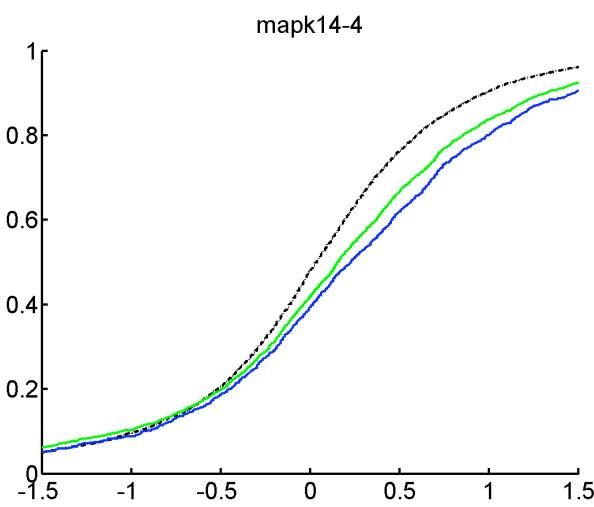
Experiment: mapk14-3

mi/siRNA: MAPK14-3



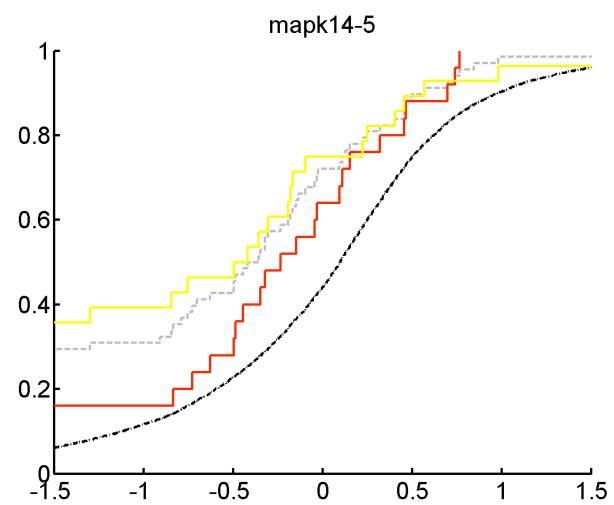
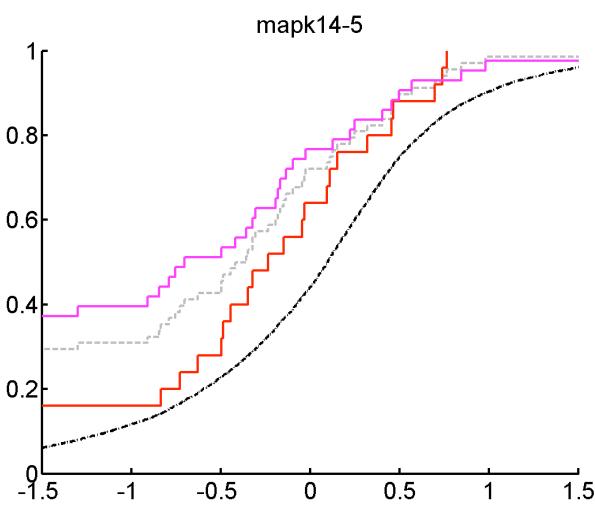
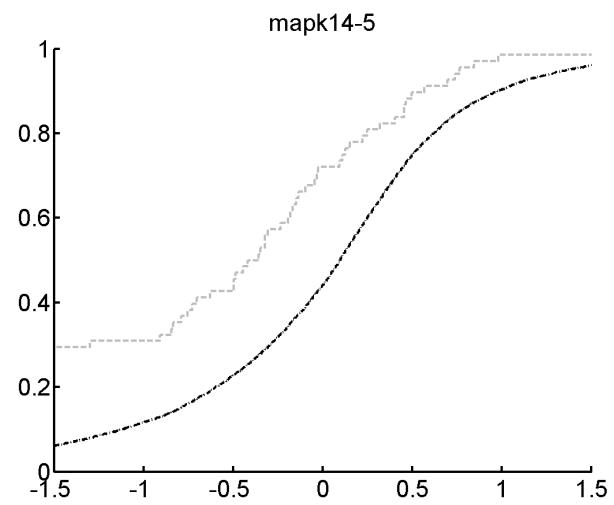
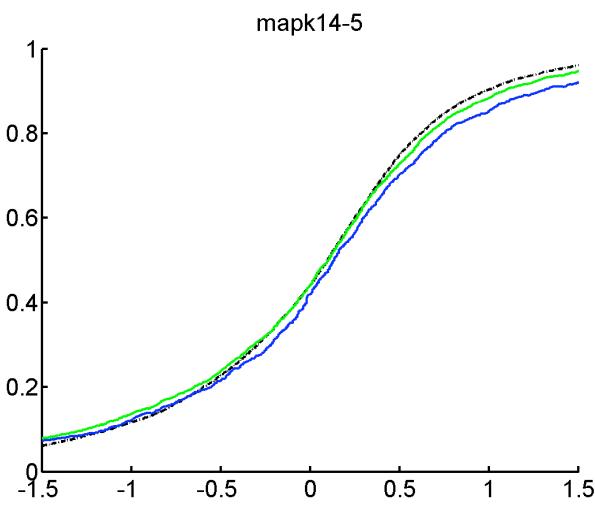
Experiment: mapk14-4

mi/siRNA: MAPK14-4



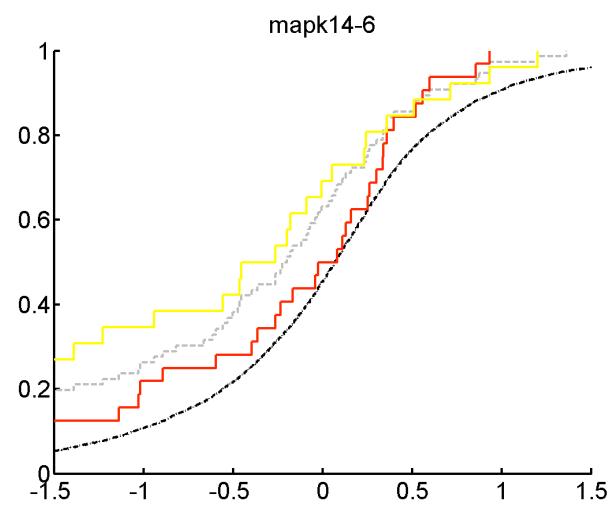
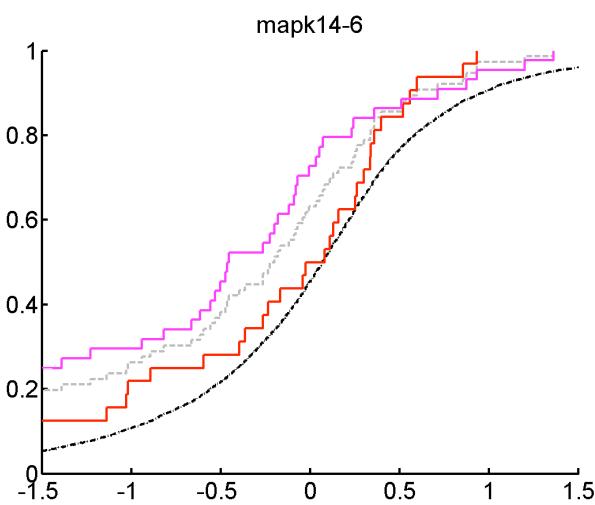
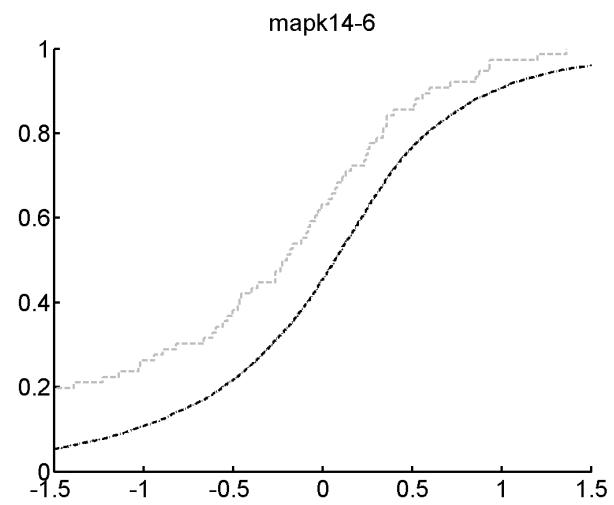
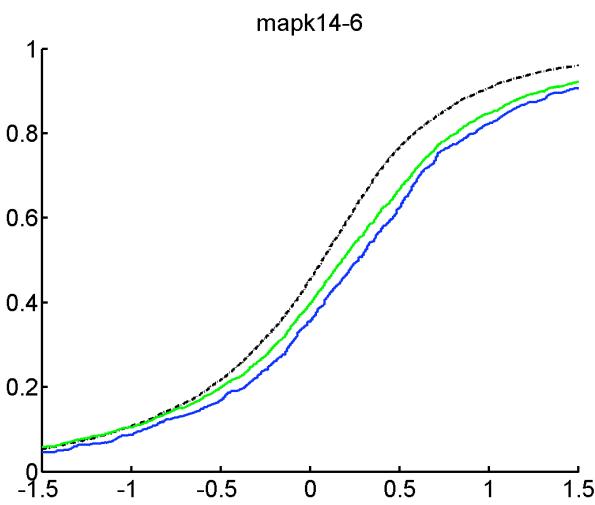
Experiment: mapk14-5

mi/siRNA: MAPK14-5



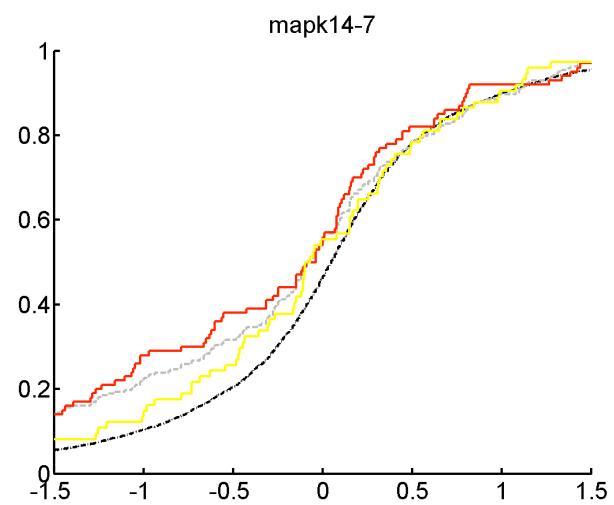
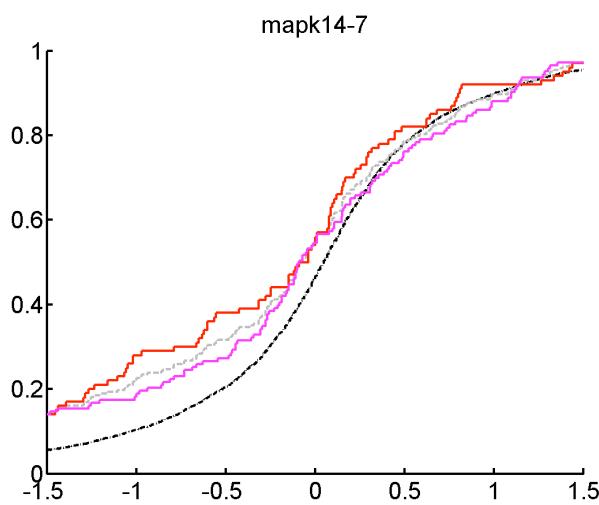
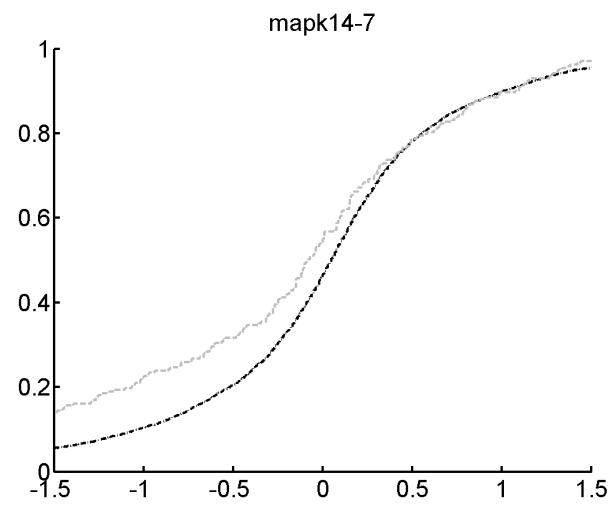
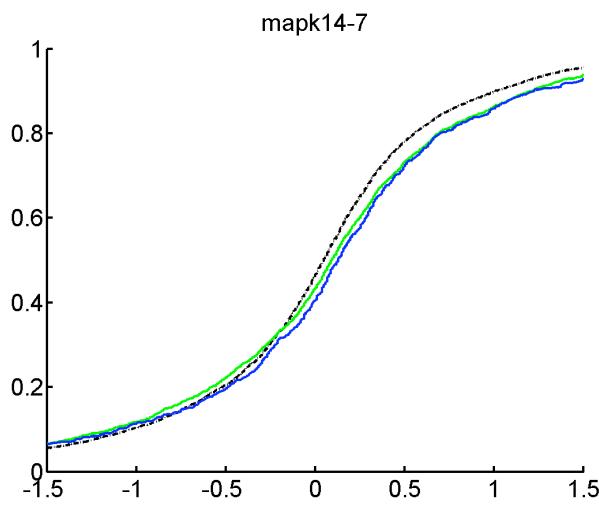
Experiment: mapk14-6

mi/siRNA: MAPK14-6



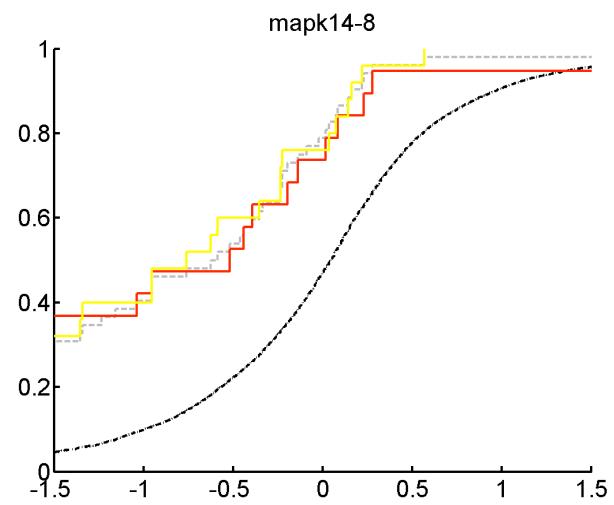
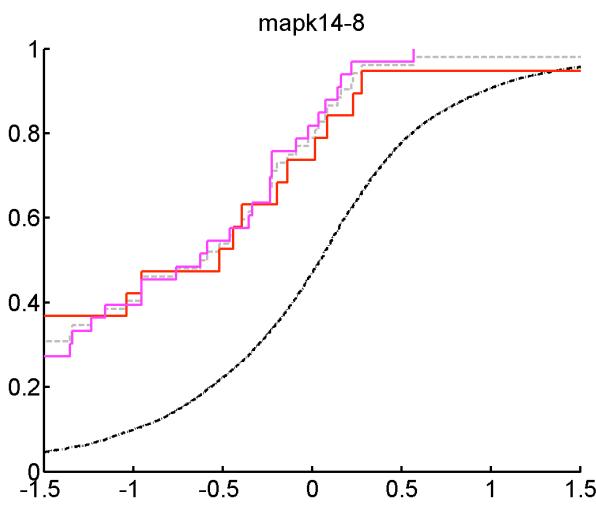
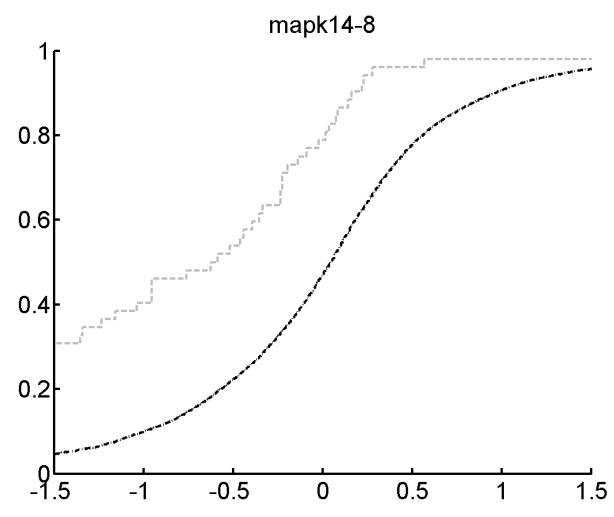
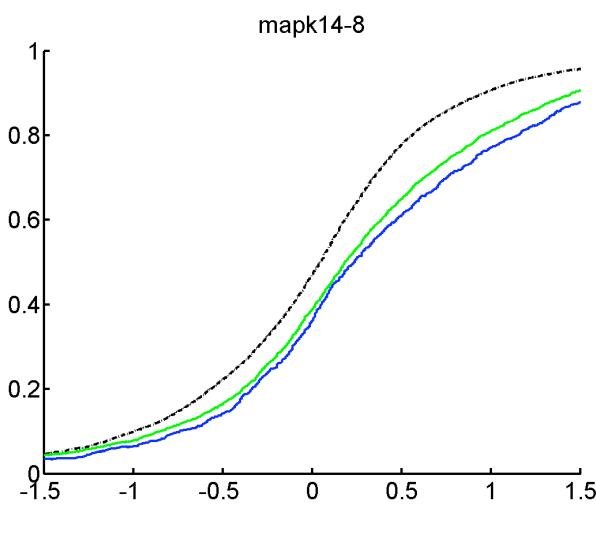
Experiment: mapk14-7

mi/siRNA: MAPK14-7



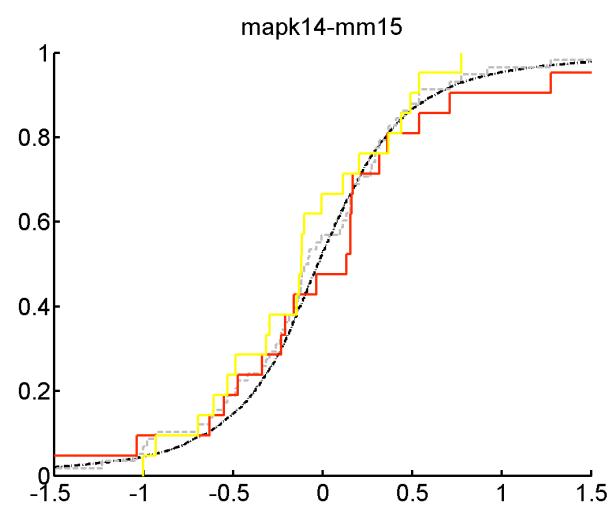
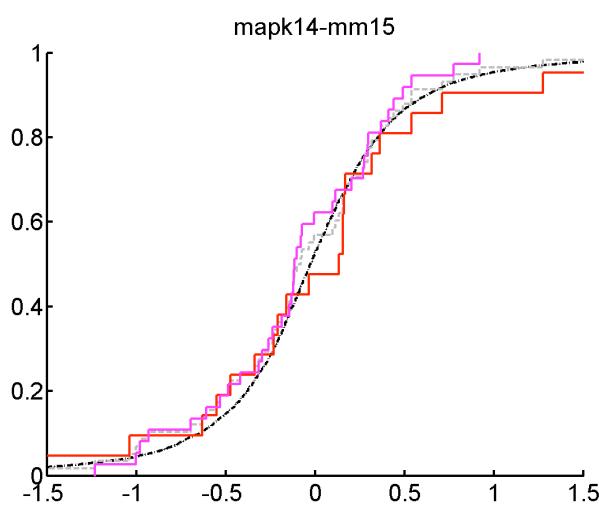
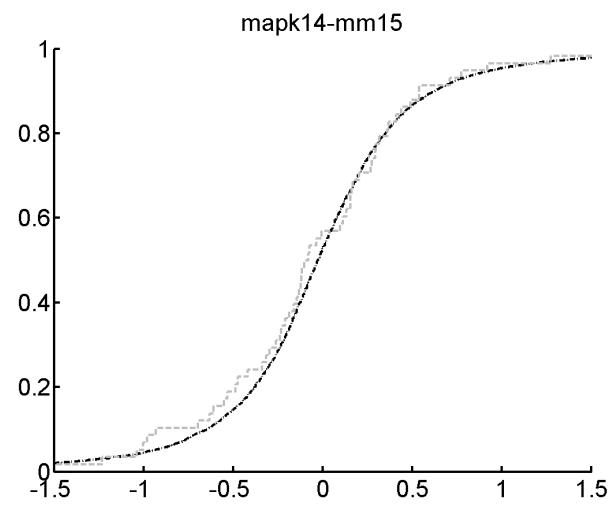
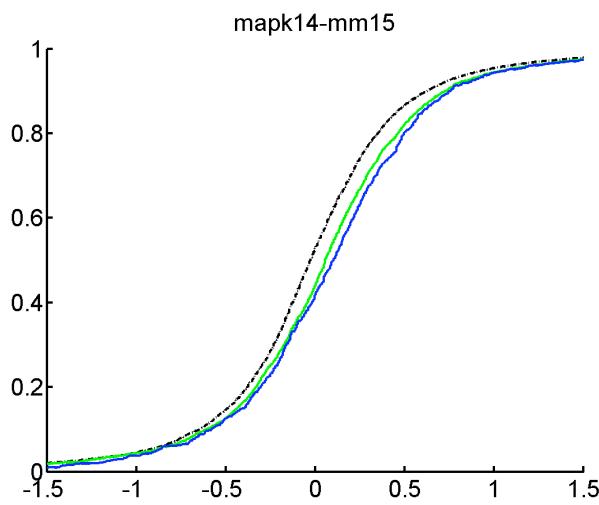
Experiment: mapk14-8

mi/siRNA: MAPK14-8



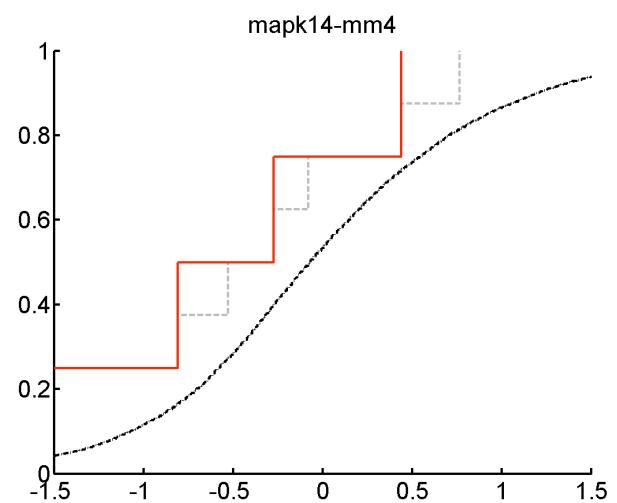
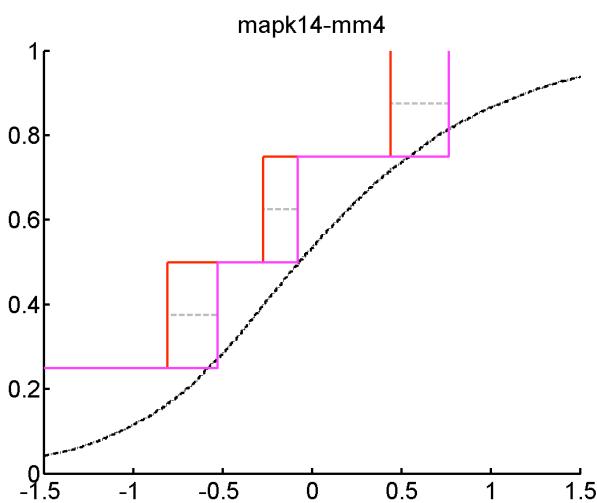
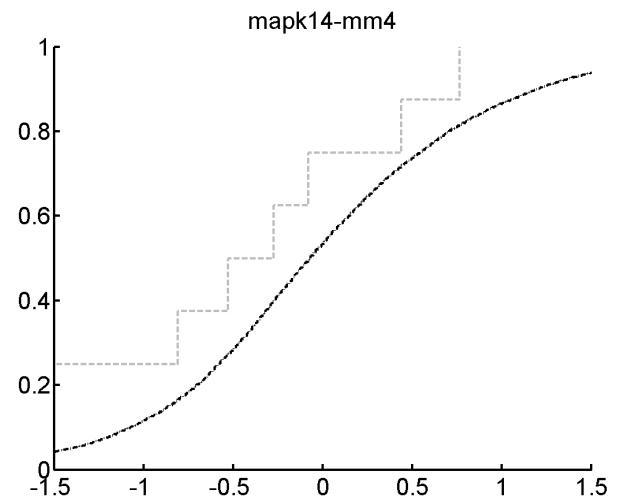
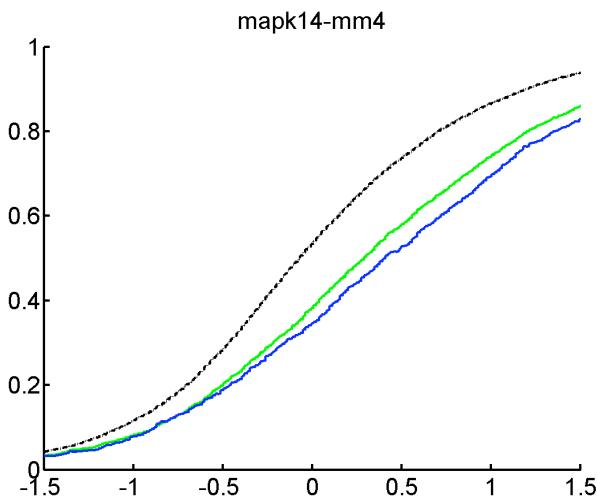
Experiment: mapk14-mm15

mi/siRNA: MAPK14-mis15



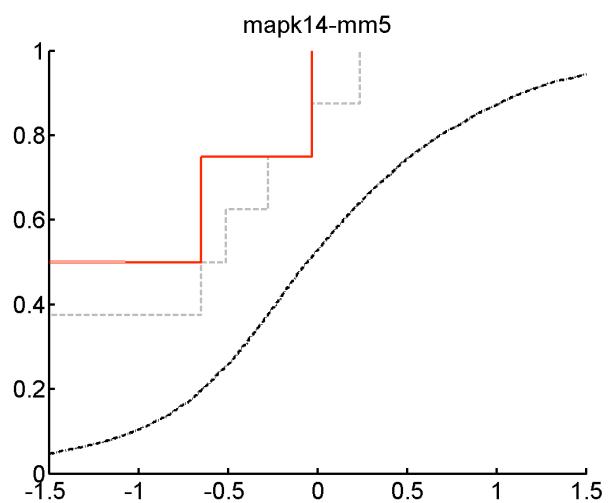
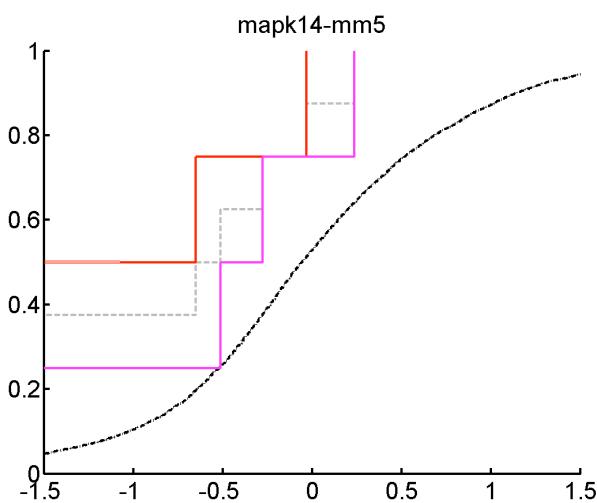
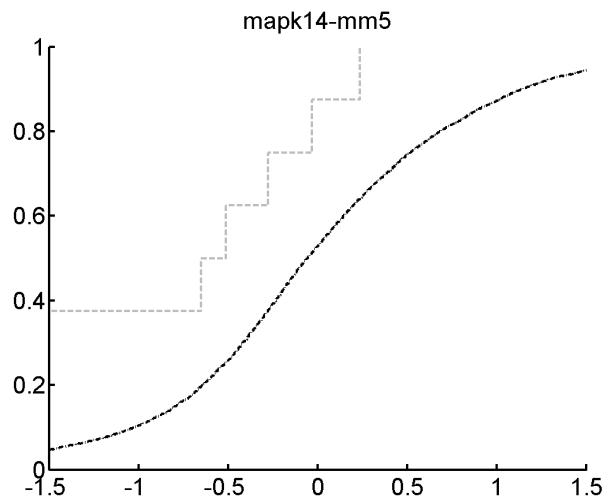
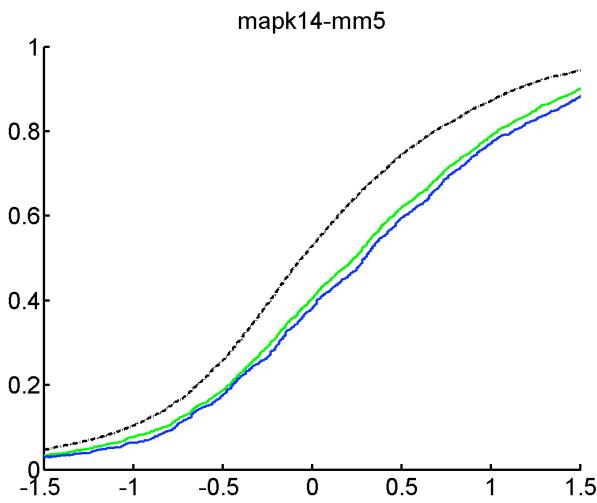
Experiment: mapk14-mm4

mi/siRNA: MAPK14-mis4



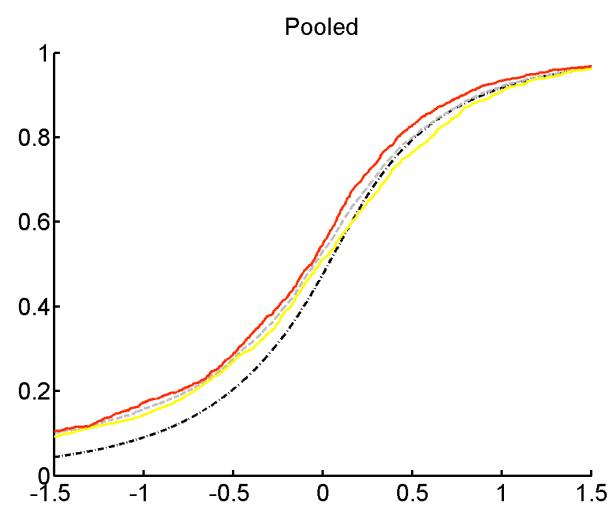
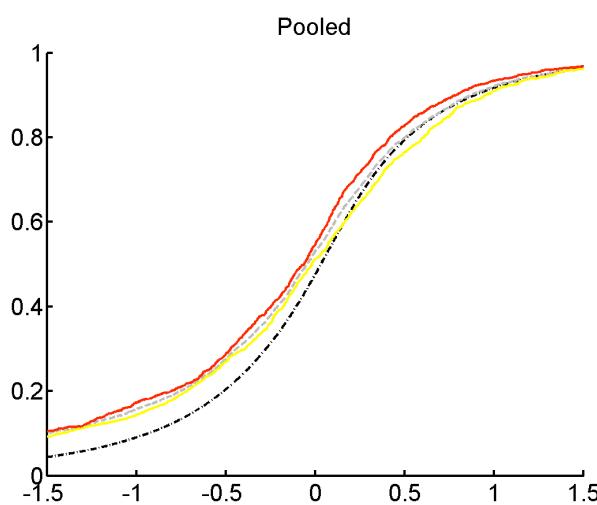
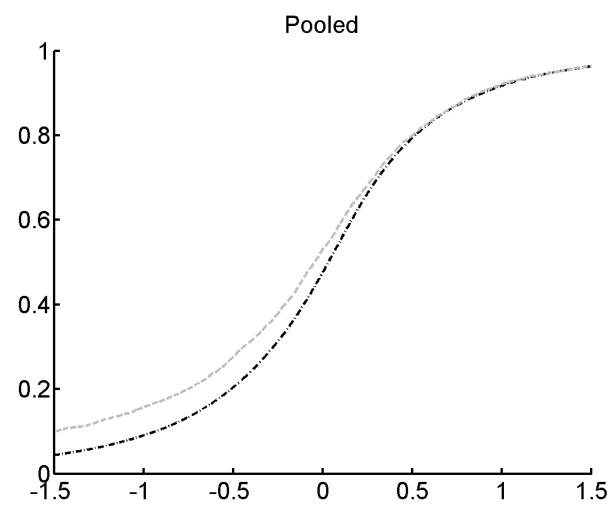
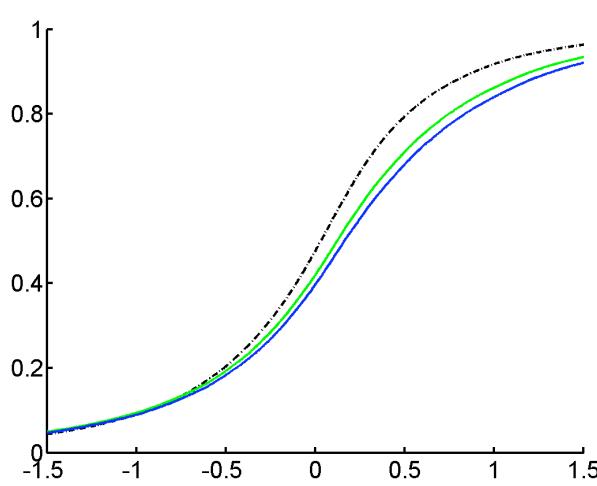
Experiment: mapk14-mm5

mi/siRNA: MAPK14-mis5



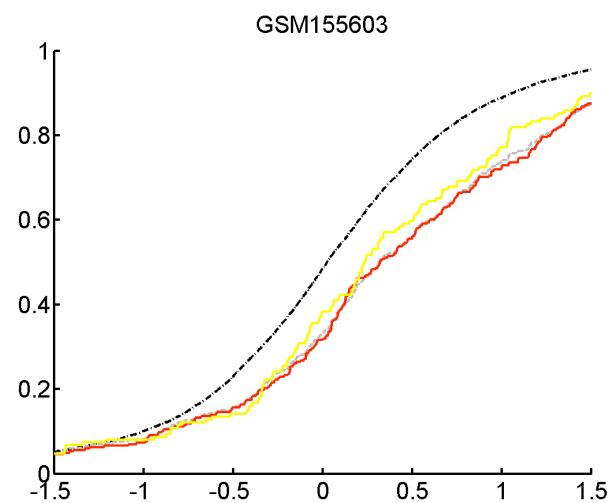
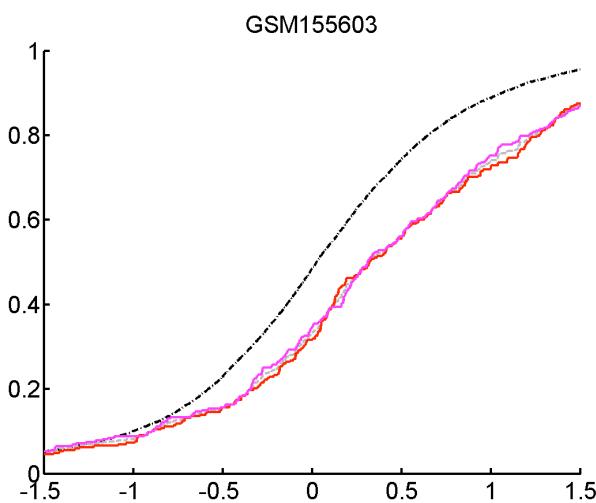
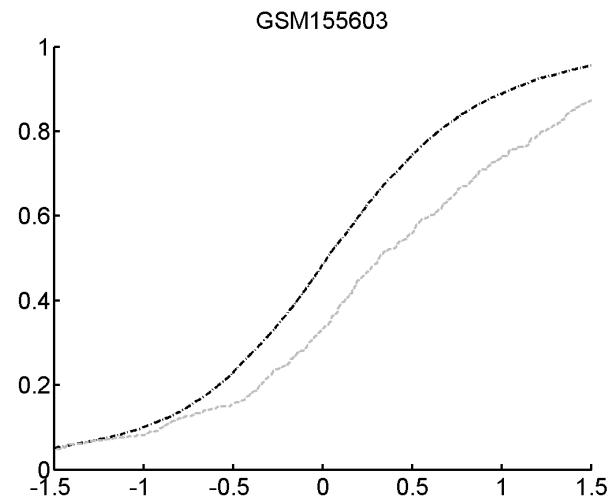
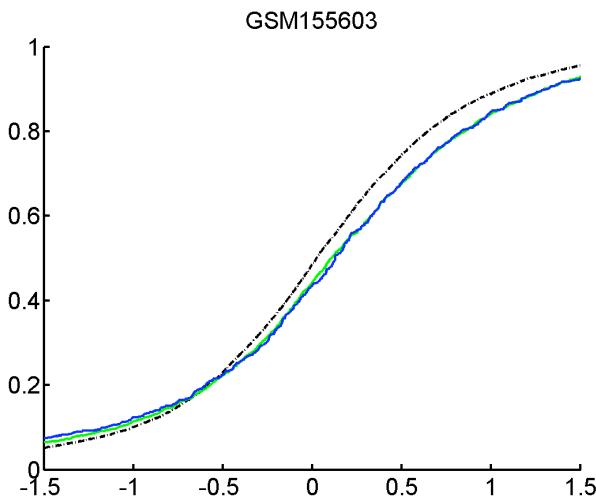
Experiment: sirna

mi/siRNA: pooled



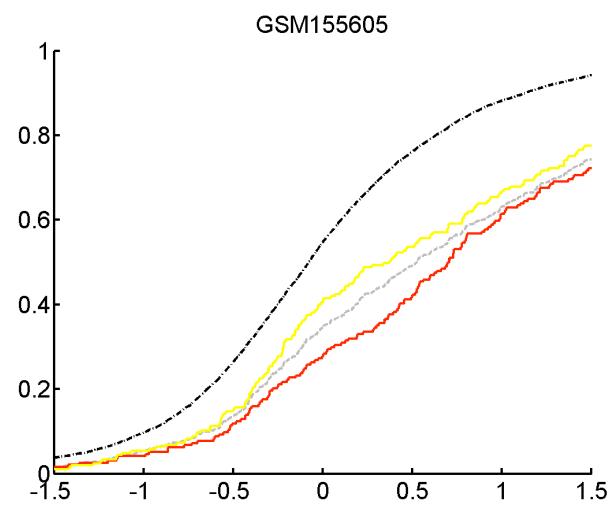
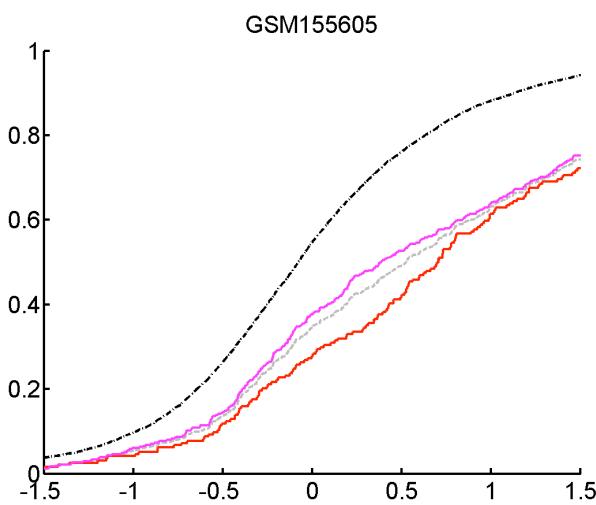
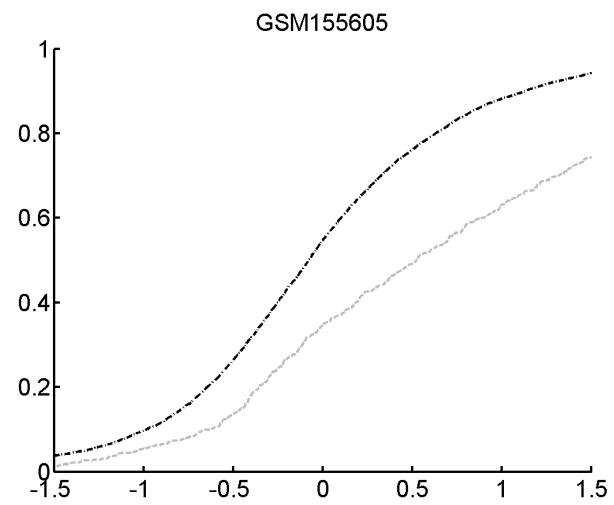
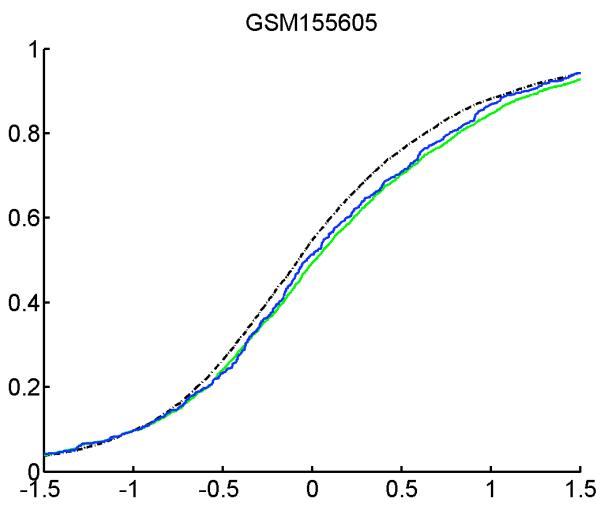
Experiment: GSM155603

mi/siRNA: miR-16-2-OME



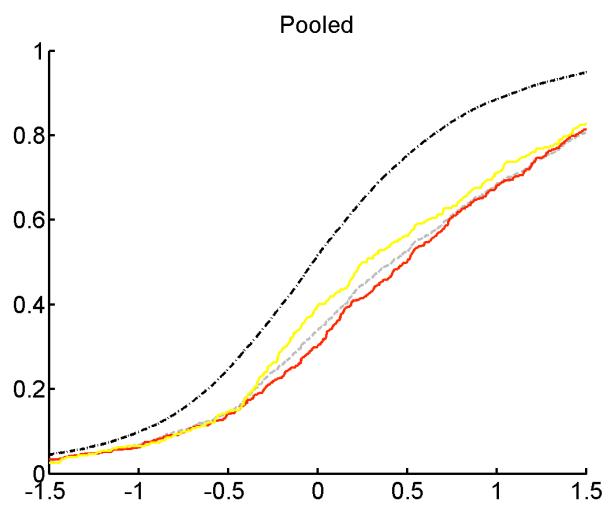
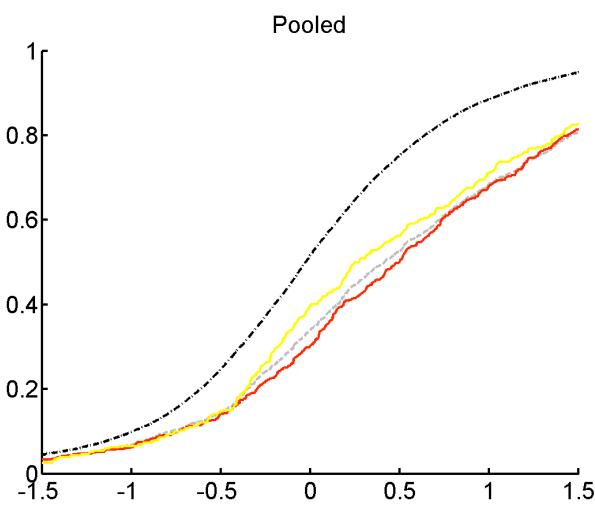
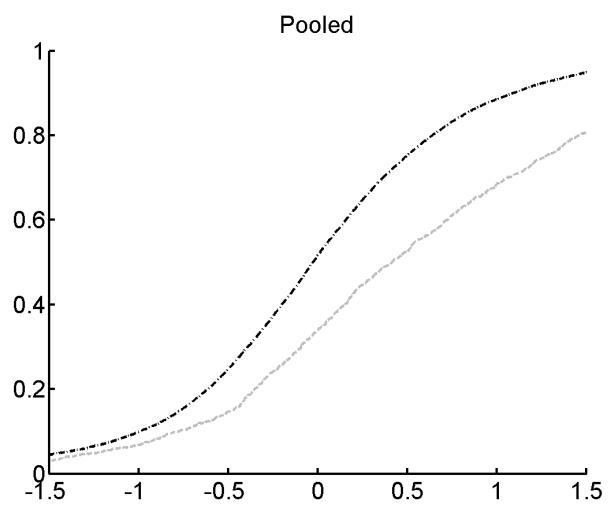
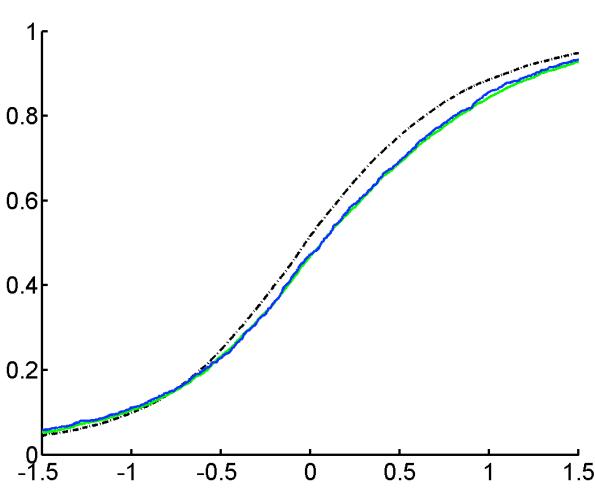
Experiment: GSM155605

mi/siRNA: miR-106b-2-OME



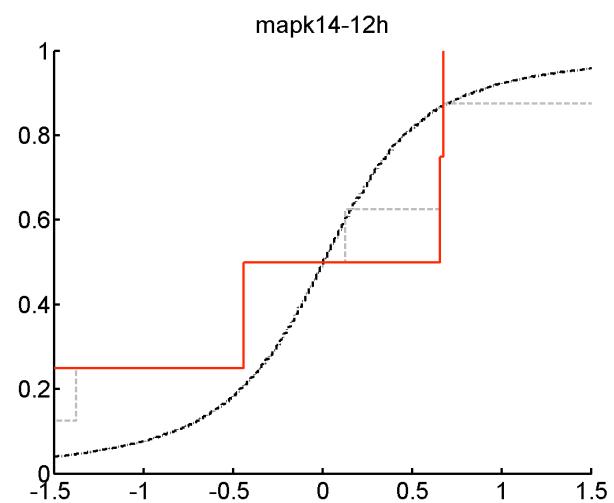
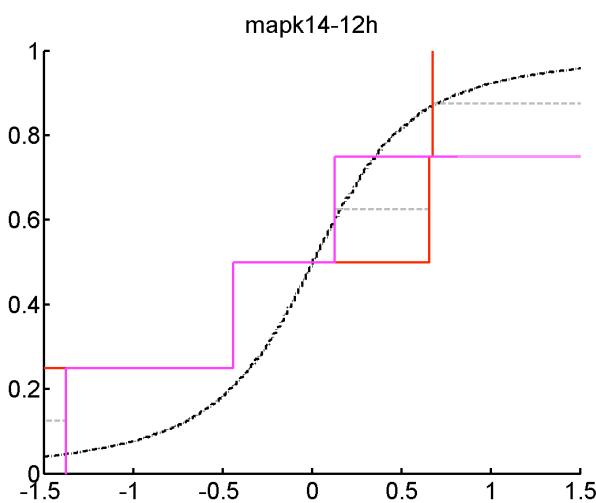
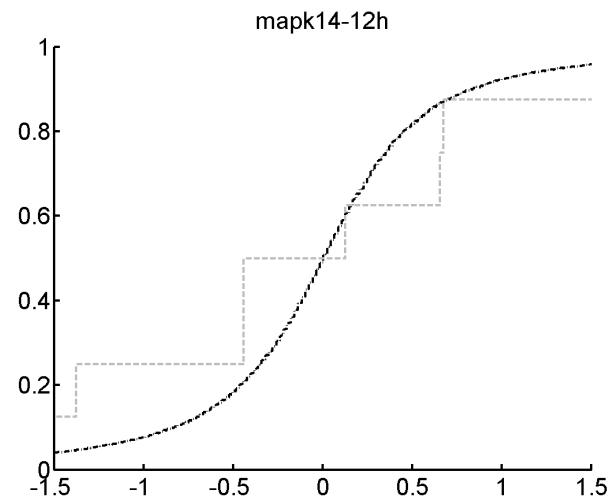
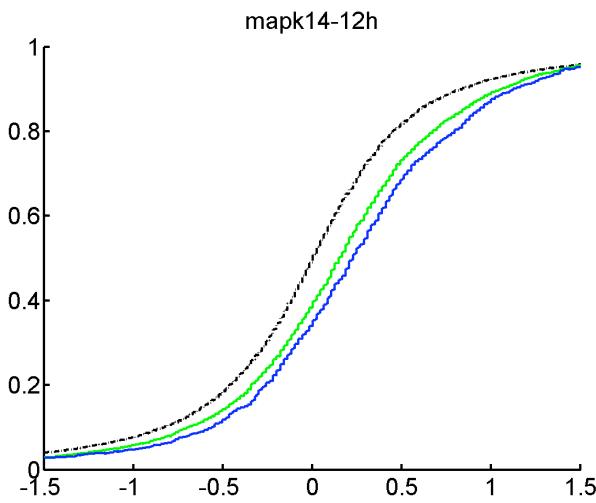
Experiment: ome

mi/siRNA: pooled



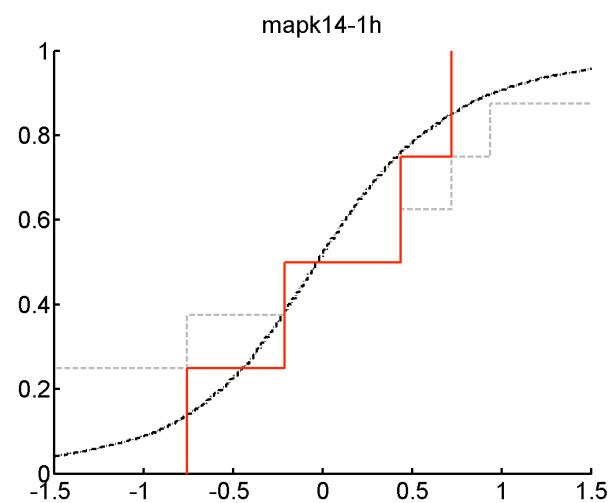
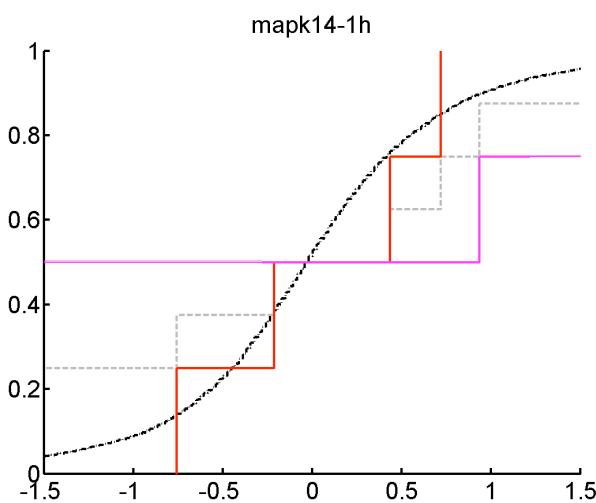
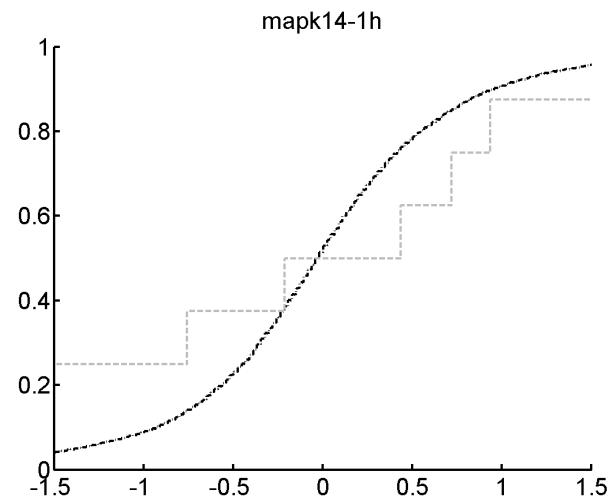
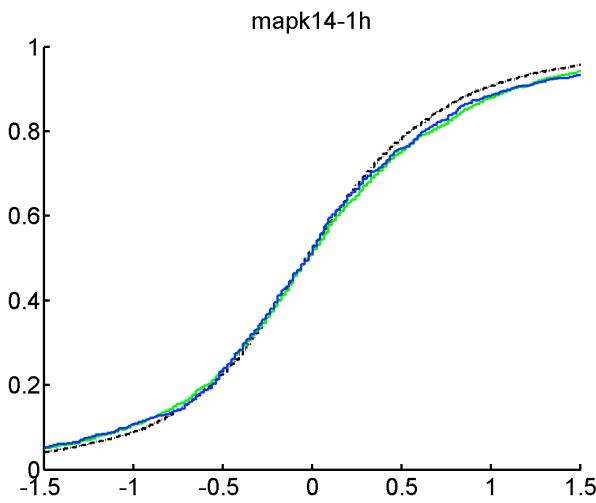
Experiment: mapk14-12h

mi/siRNA: MAPK14



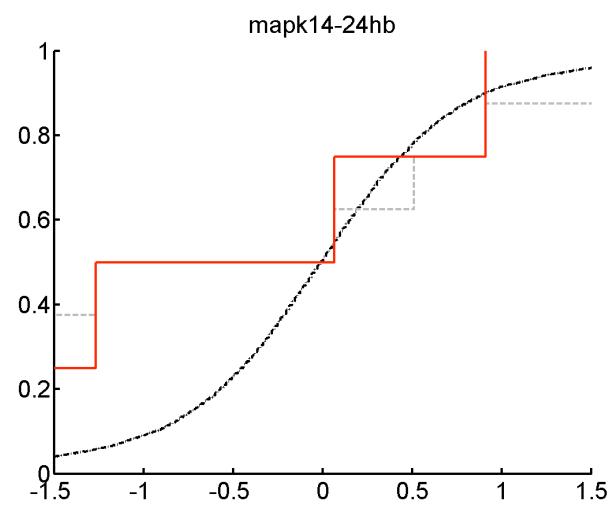
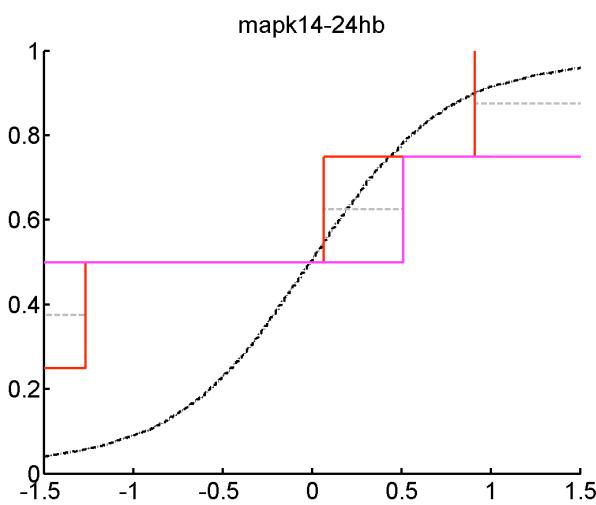
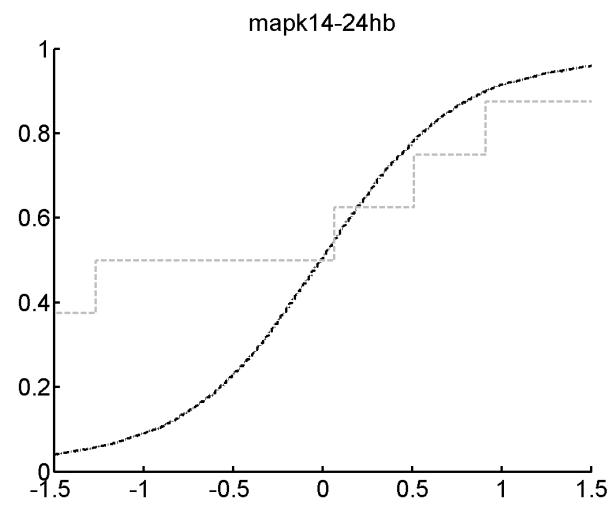
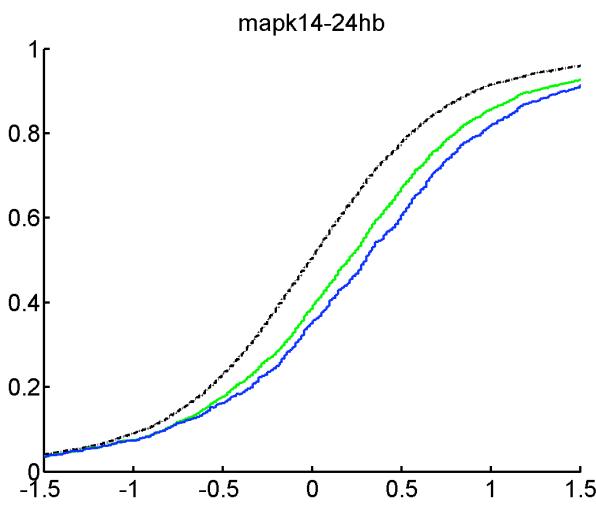
Experiment: mapk14-1h

mi/siRNA: MAPK14



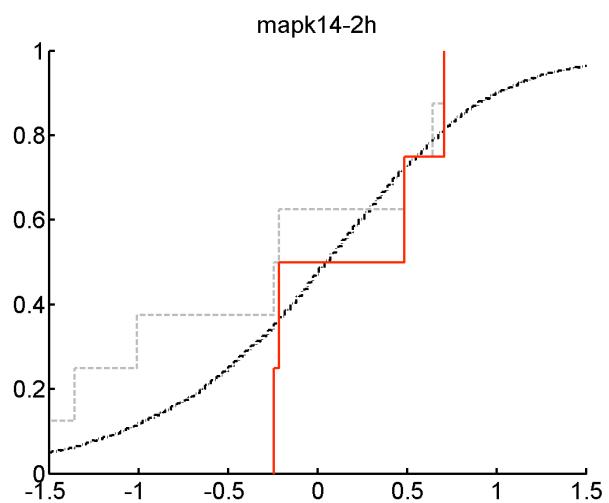
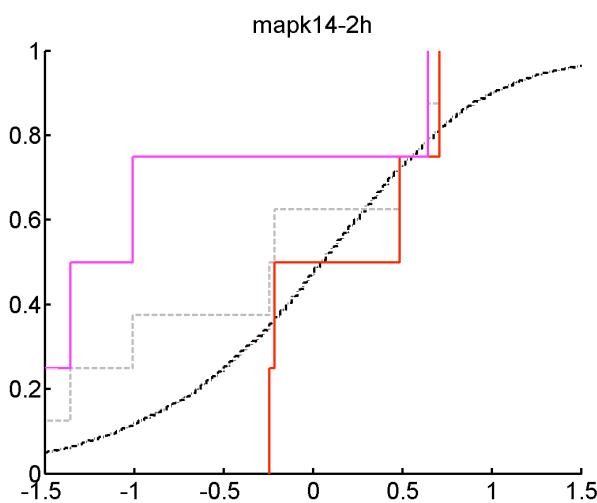
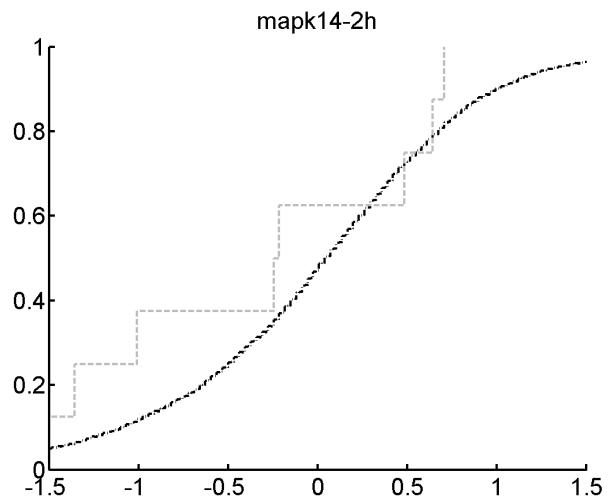
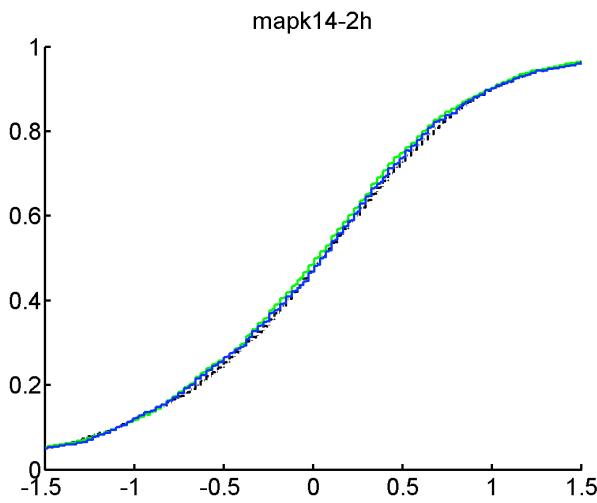
Experiment: mapk14-24hb

mi/siRNA: MAPK14



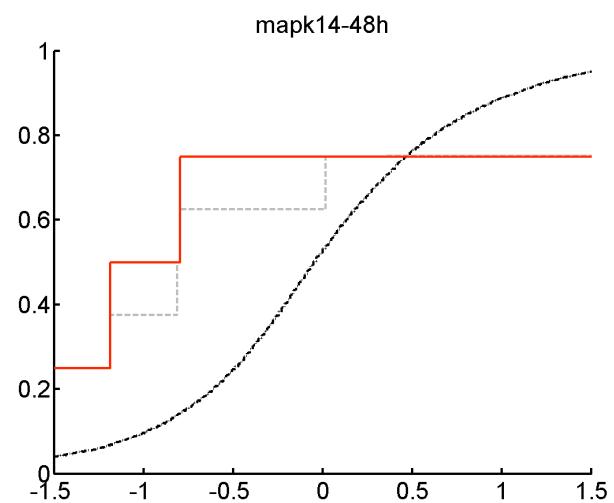
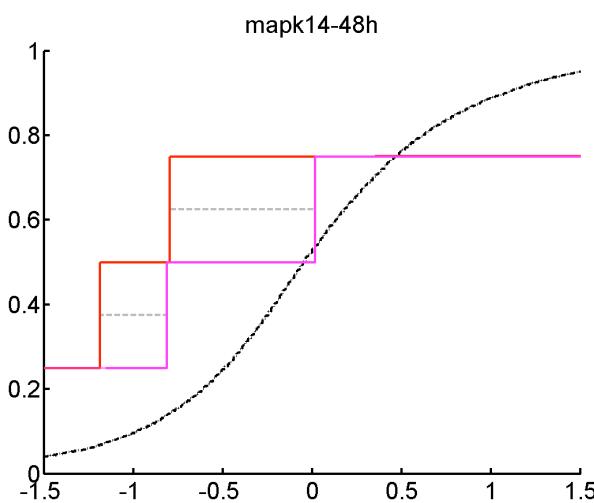
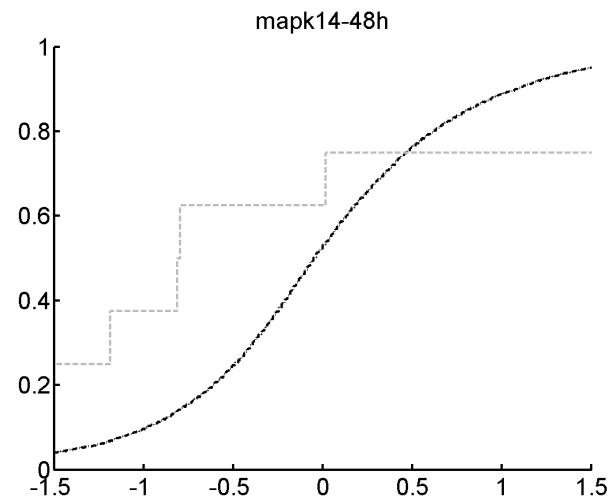
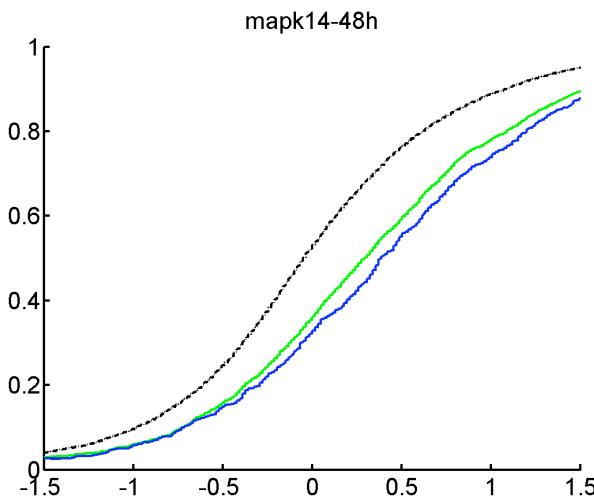
Experiment: mapk14-2h

mi/siRNA: MAPK14



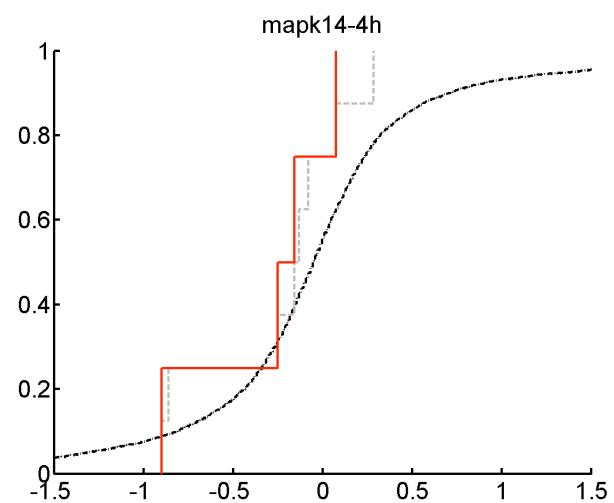
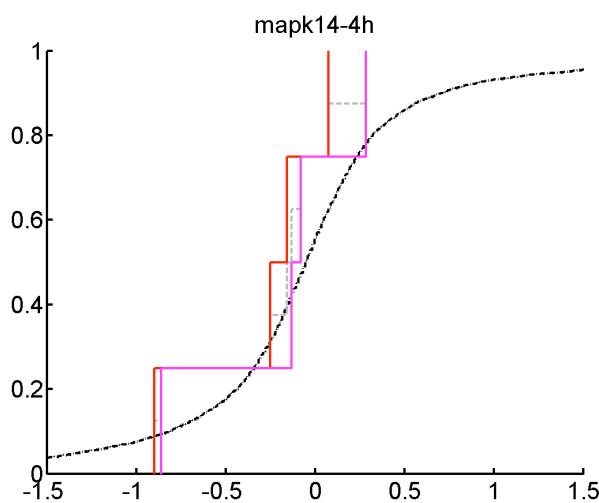
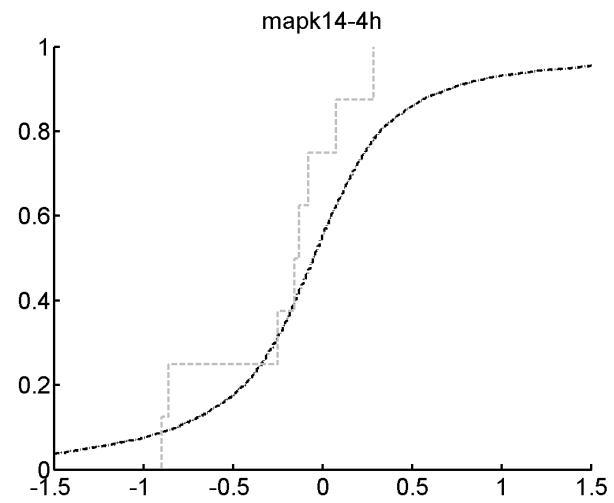
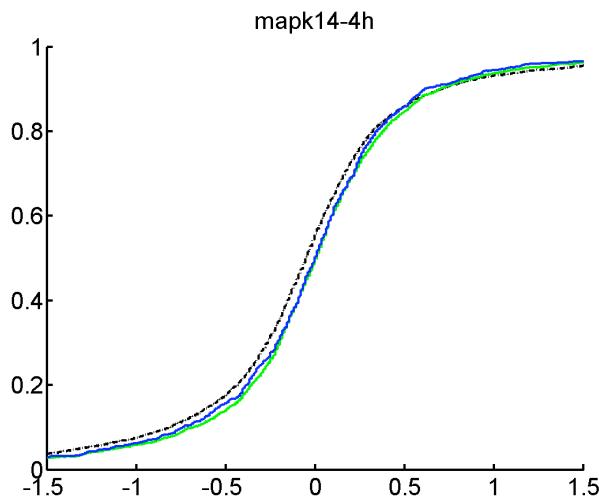
Experiment: mapk14-48h

mi/siRNA: MAPK14



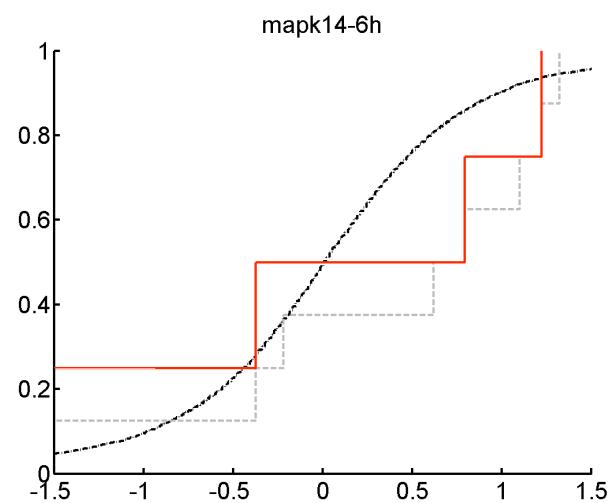
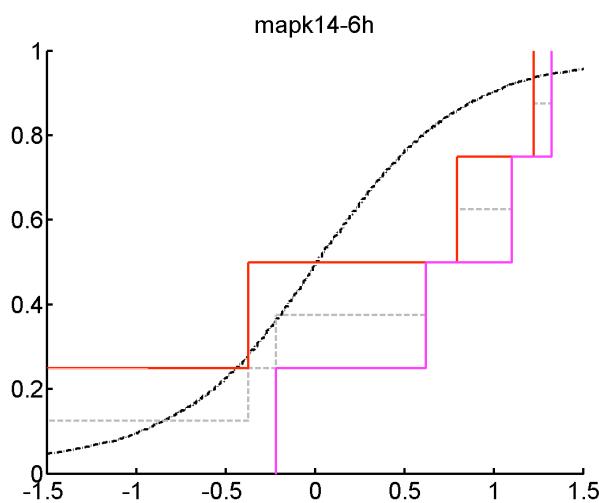
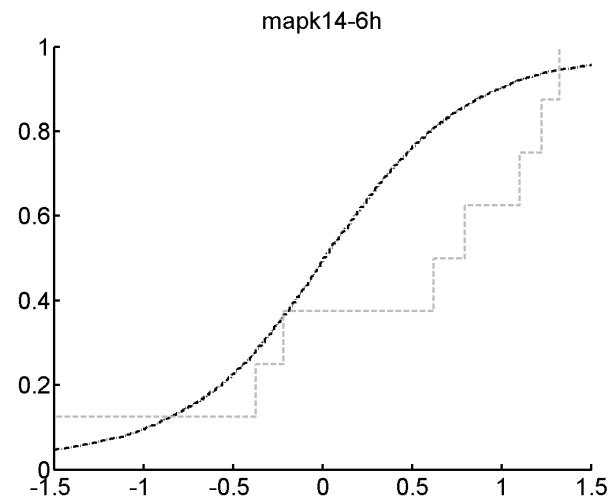
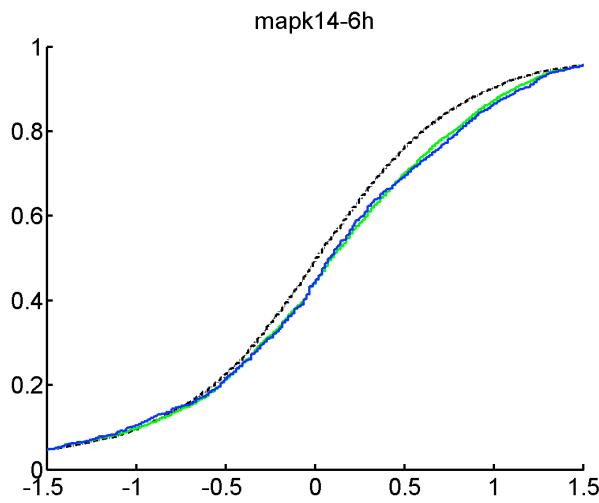
Experiment: mapk14-4h

mi/siRNA: MAPK14



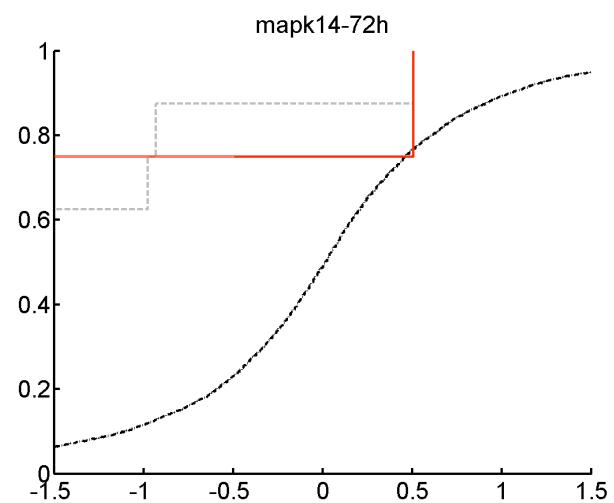
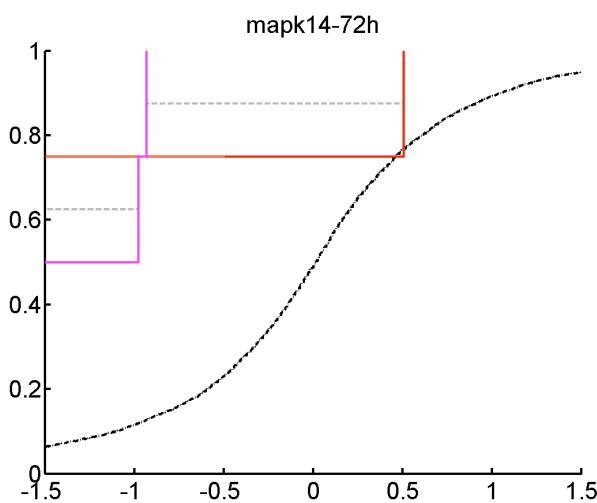
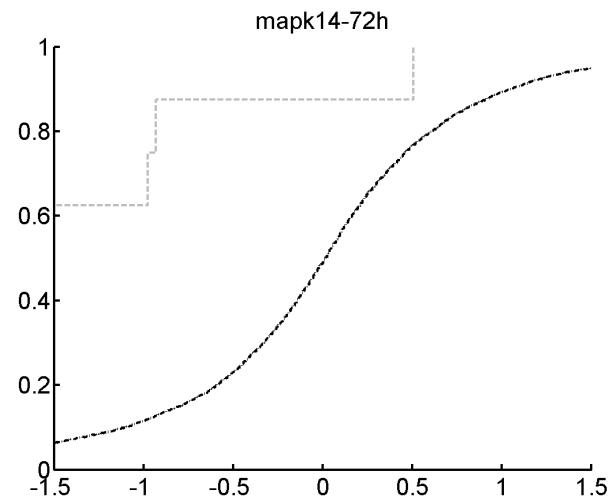
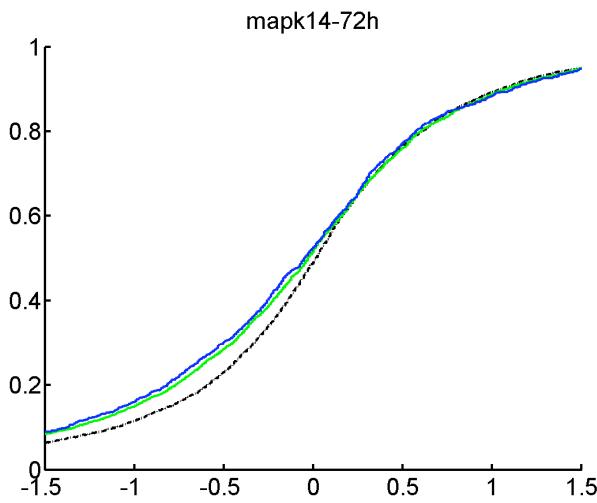
Experiment: mapk14-6h

mi/siRNA: MAPK14



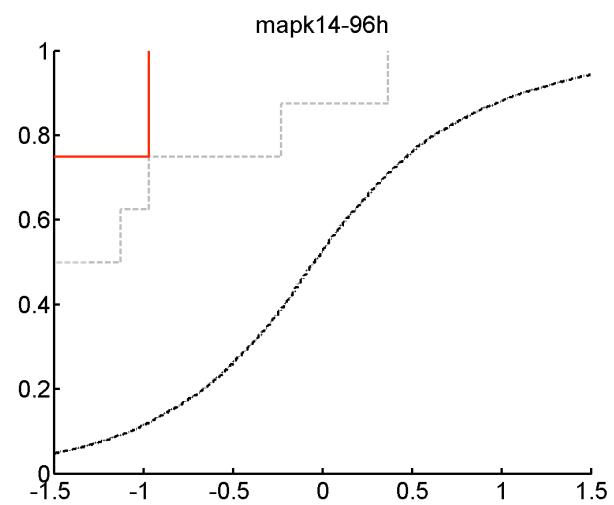
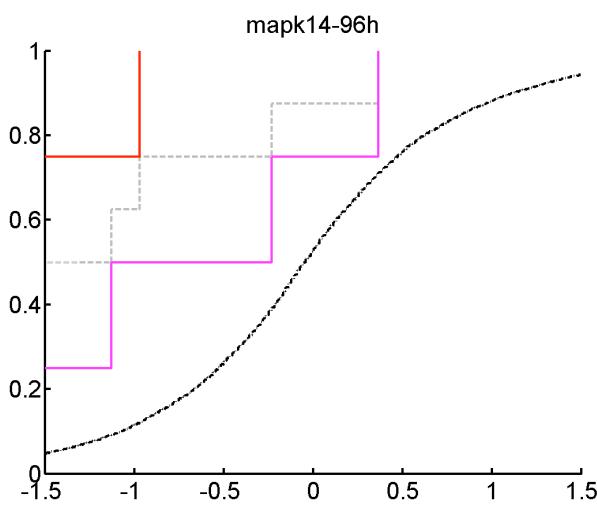
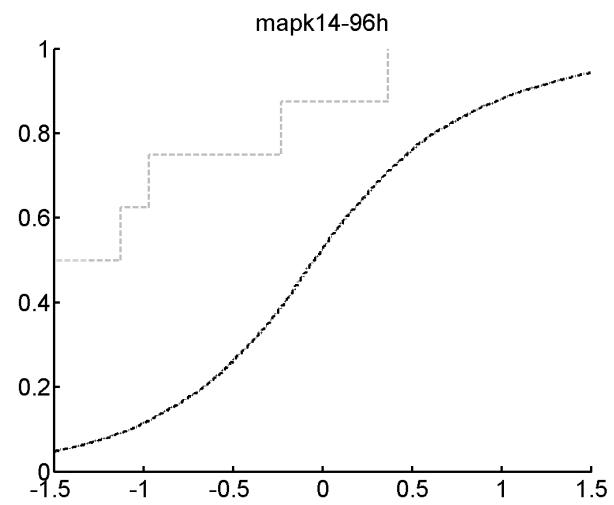
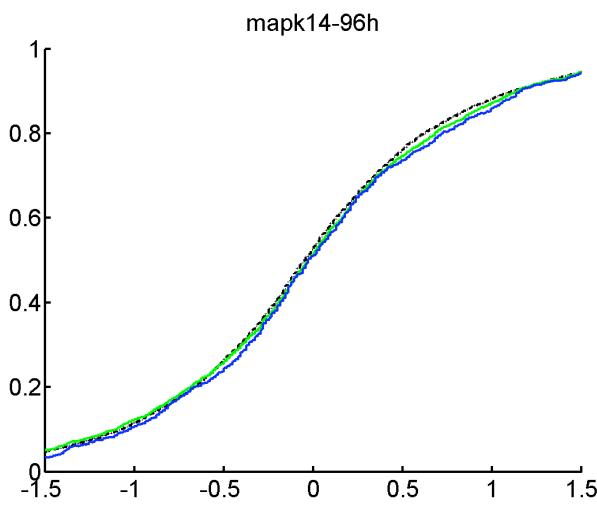
Experiment: mapk14-72h

mi/siRNA: MAPK14



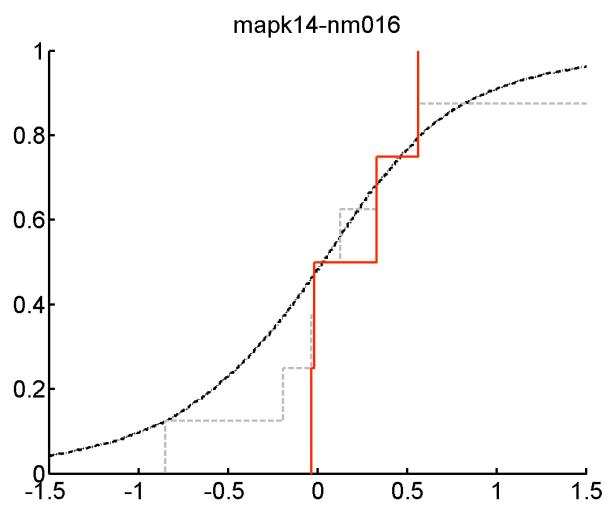
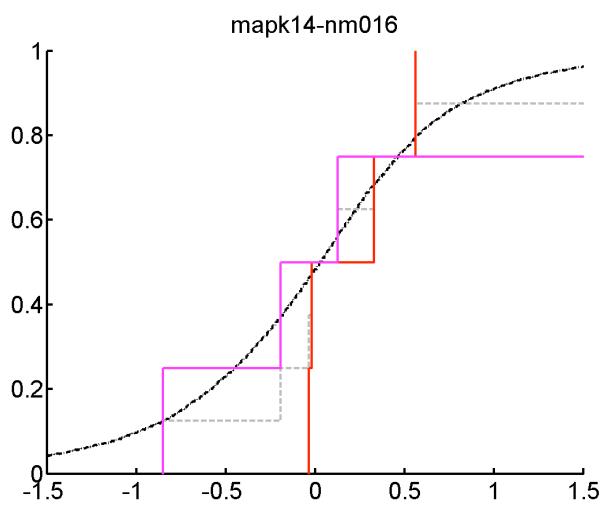
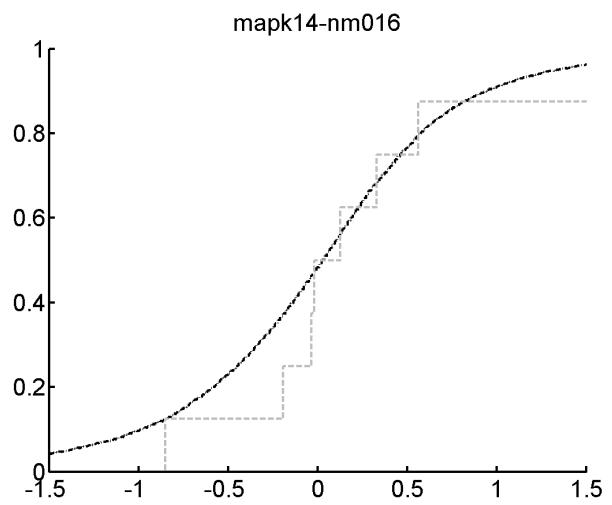
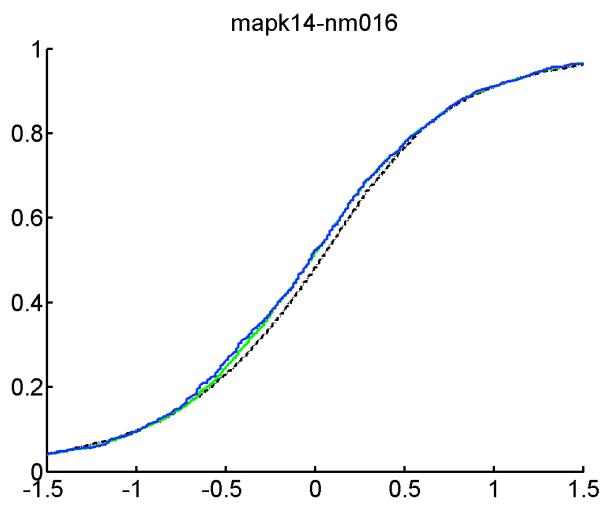
Experiment: mapk14-96h

mi/siRNA: MAPK14



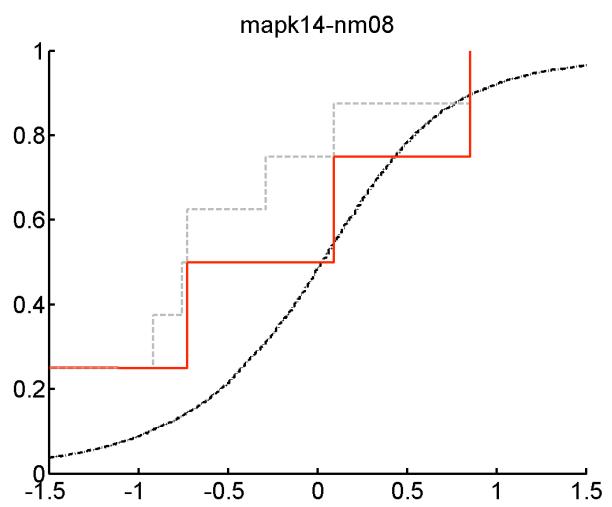
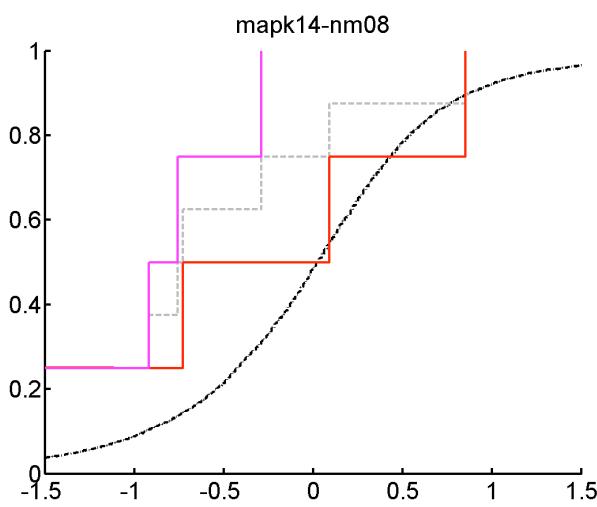
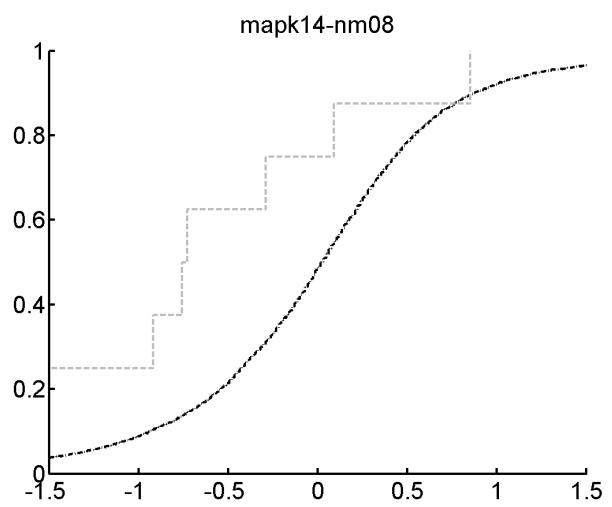
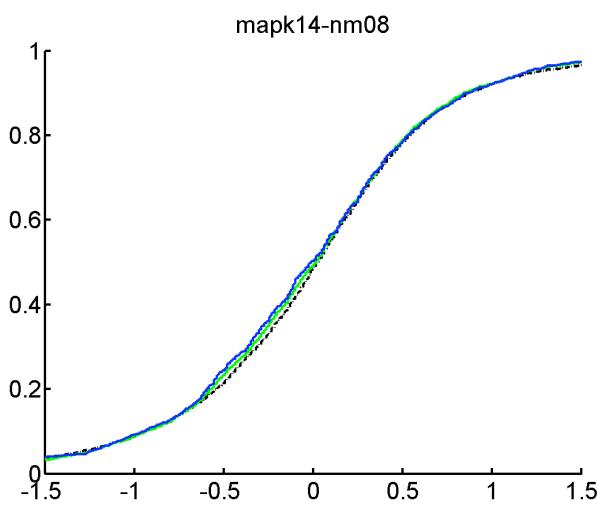
Experiment: mapk14-nm016

mi/siRNA: MAPK14-



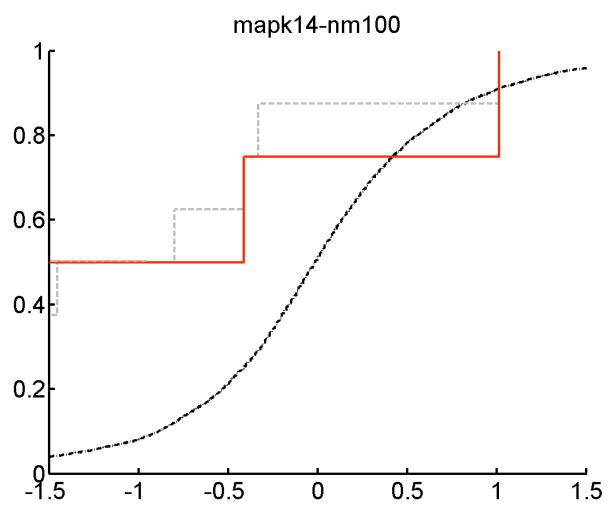
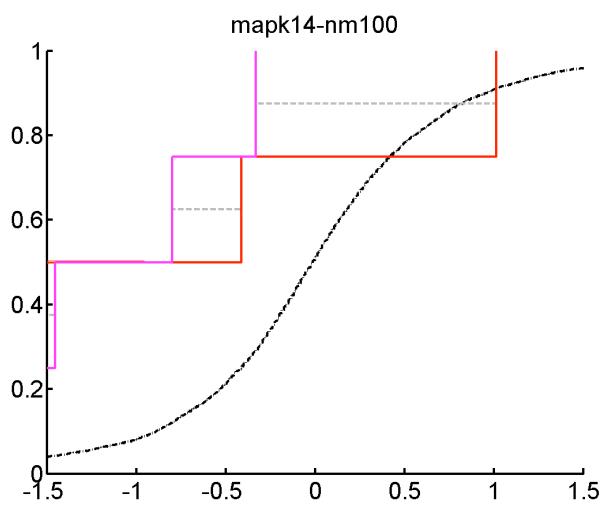
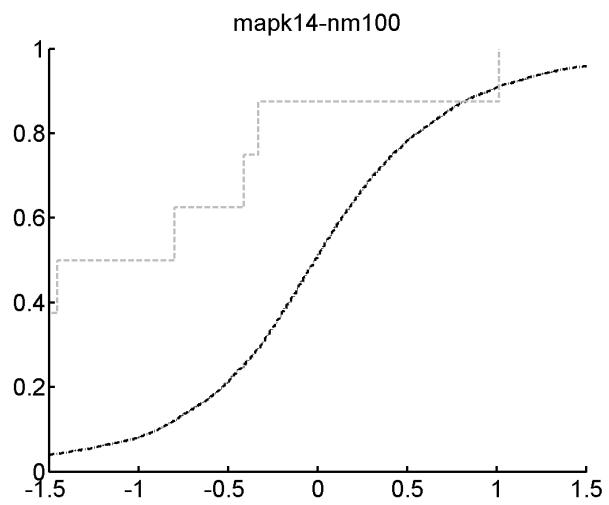
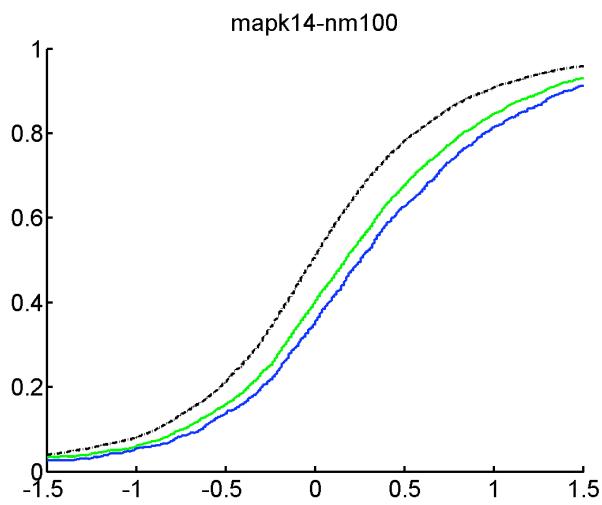
Experiment: mapk14-nm08

mi/siRNA: MAPK14-

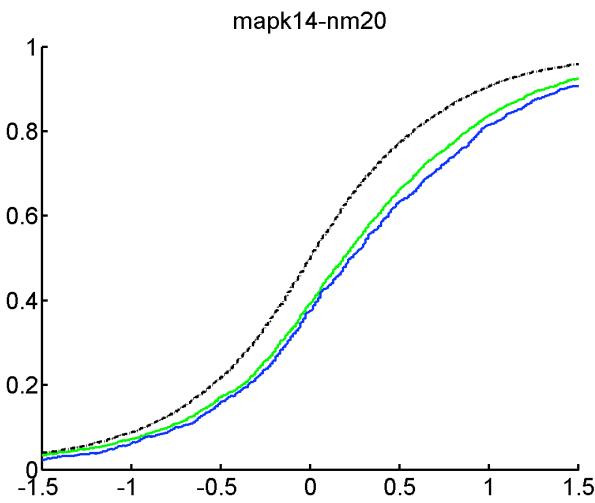


Experiment: mapk14-nm100

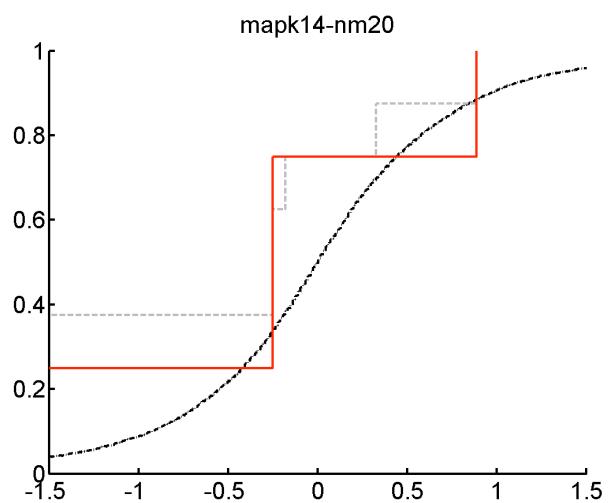
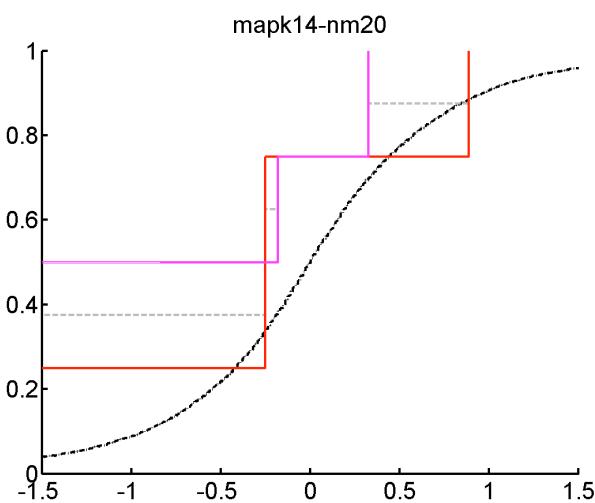
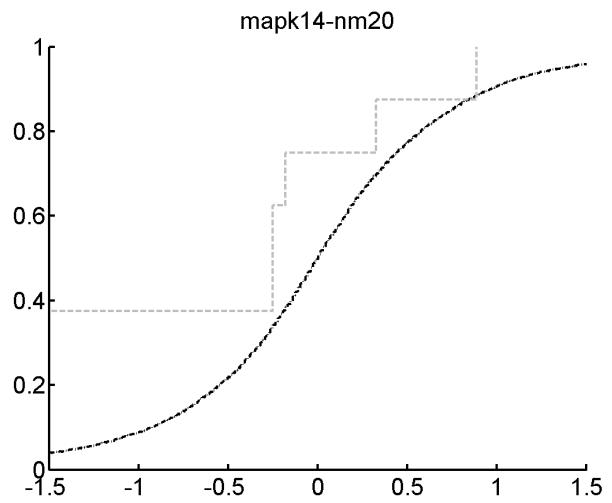
mi/siRNA: MAPK14-100nm



Experiment: mapk14-nm20

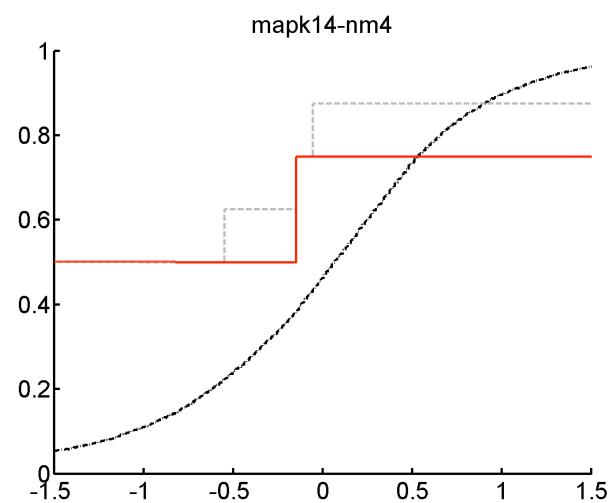
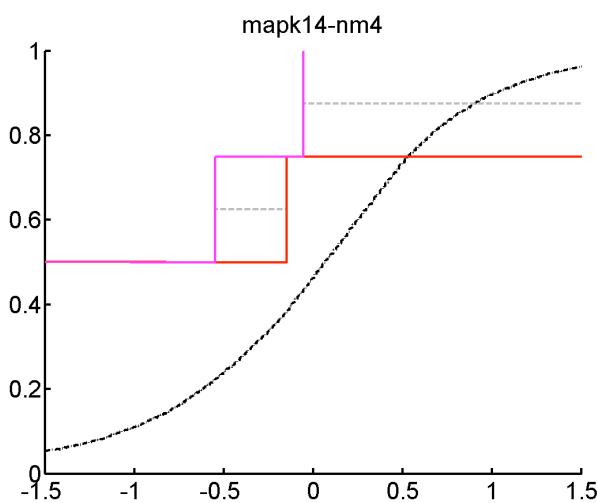
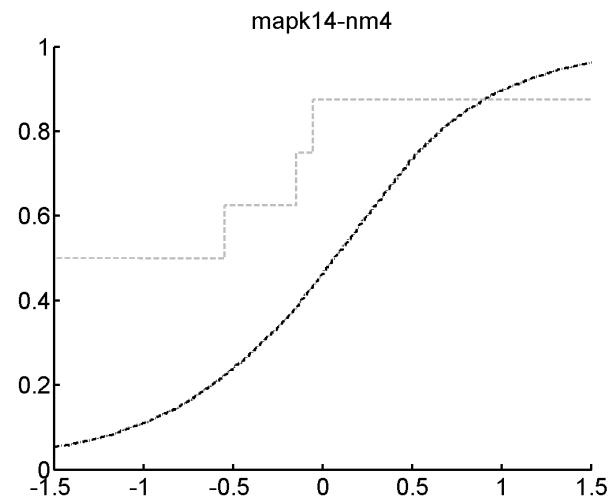
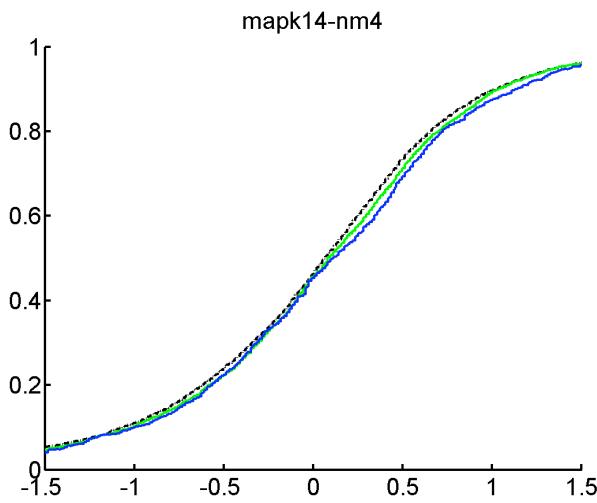


mi/siRNA: MAPK14-20nm



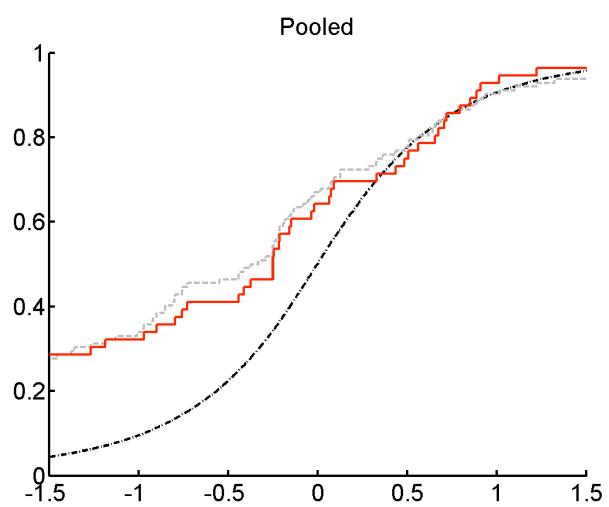
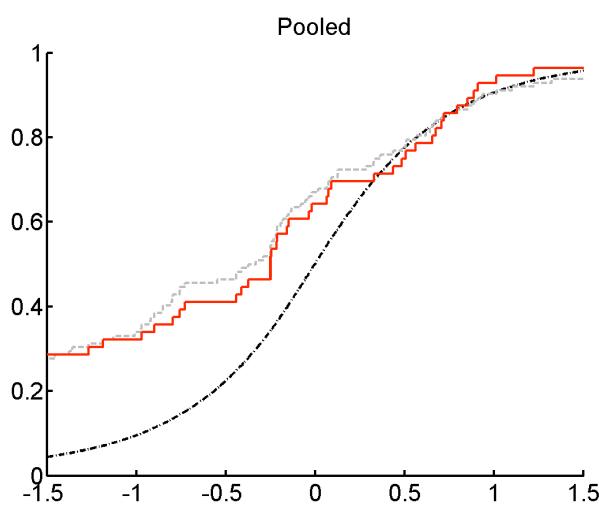
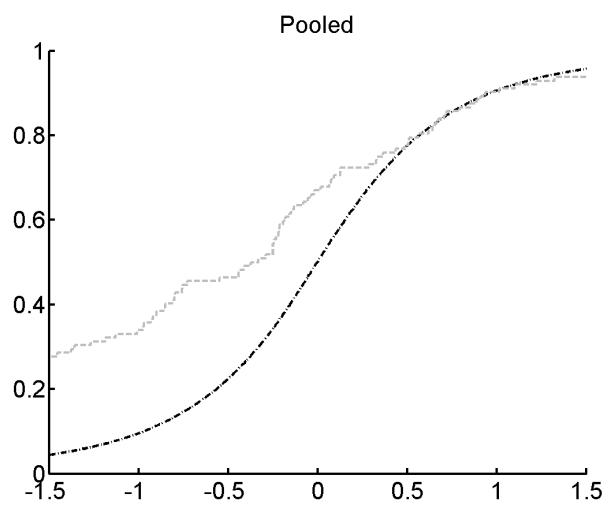
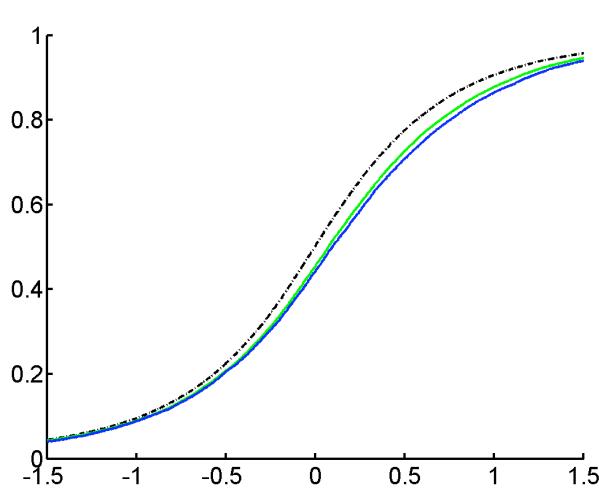
Experiment: mapk14-nm4

mi/siRNA: MAPK14-4nm



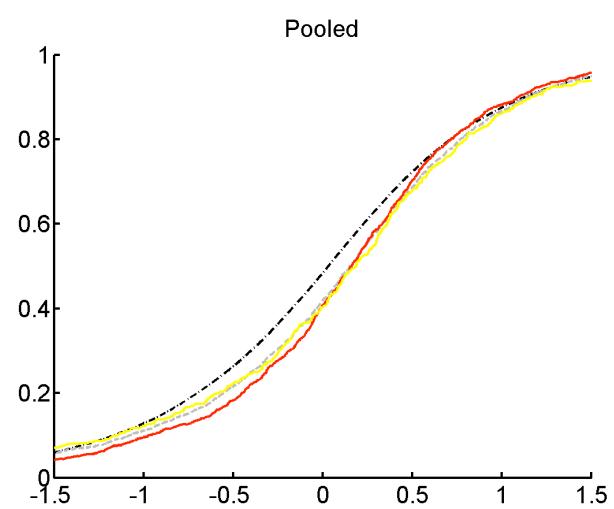
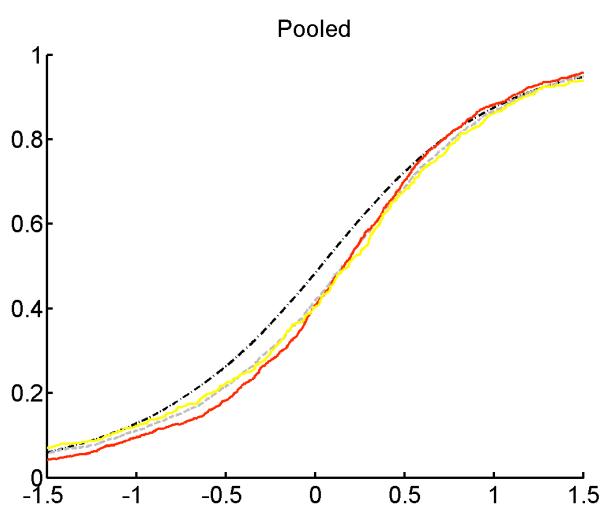
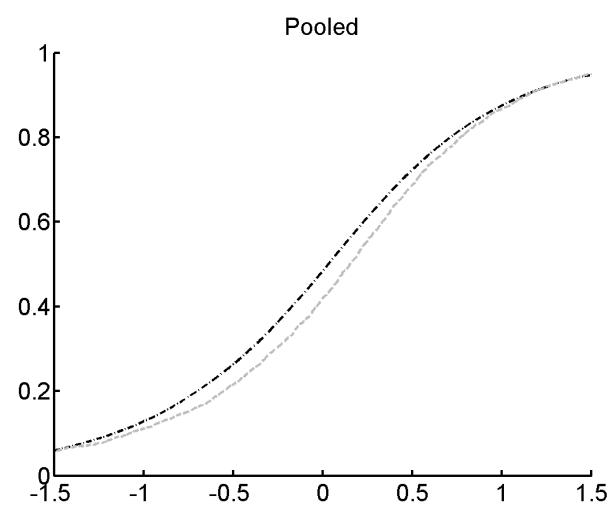
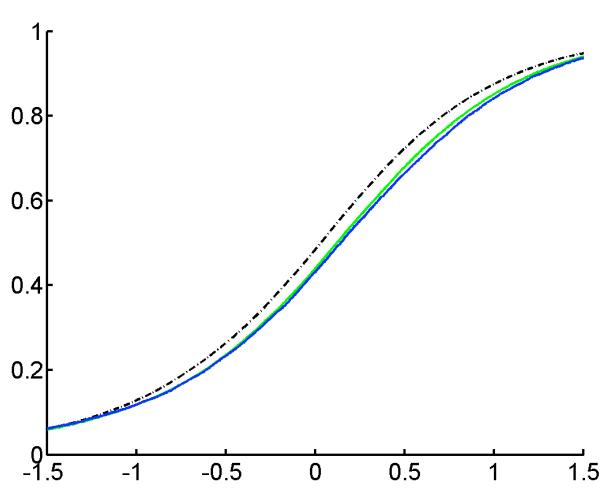
Experiment: mapk14

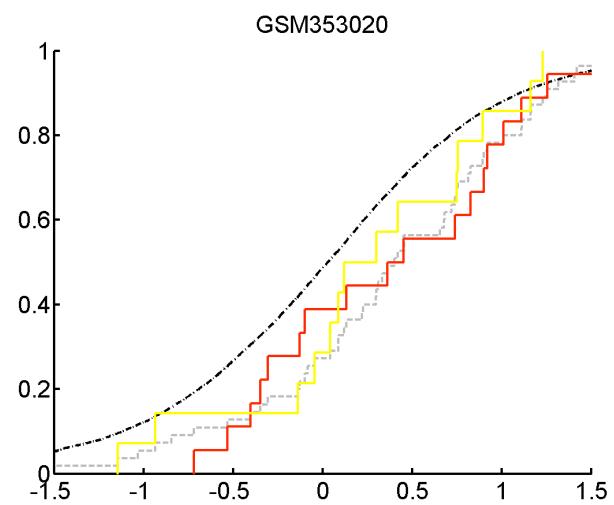
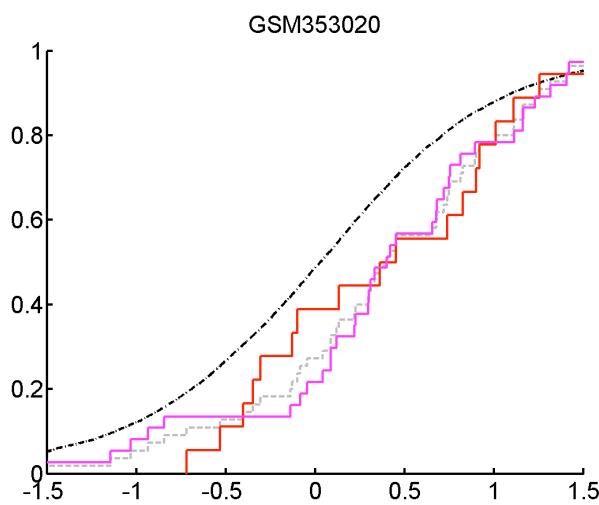
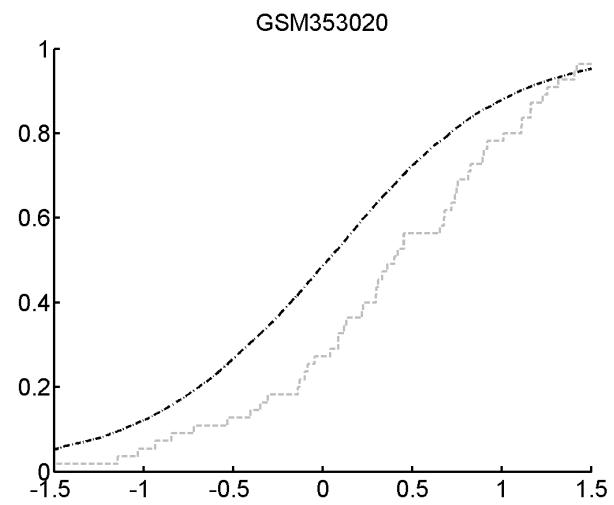
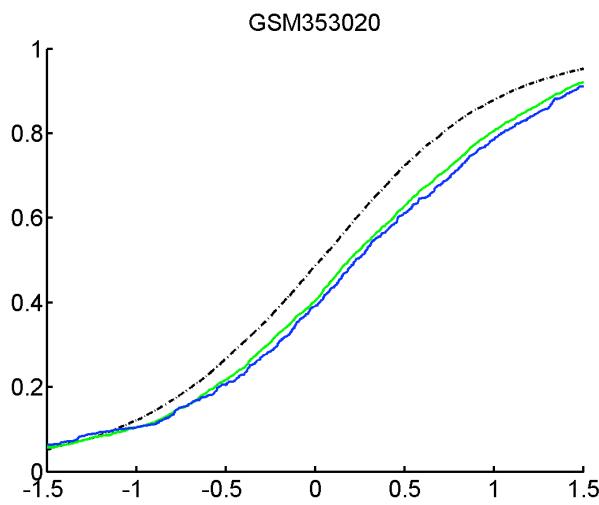
mi/siRNA: pooled



Experiment: apob

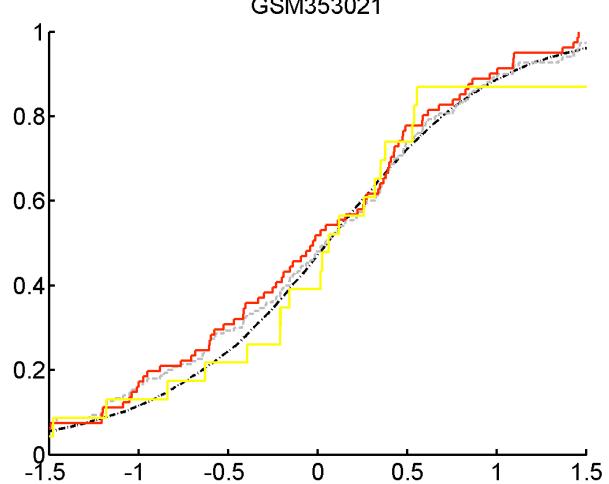
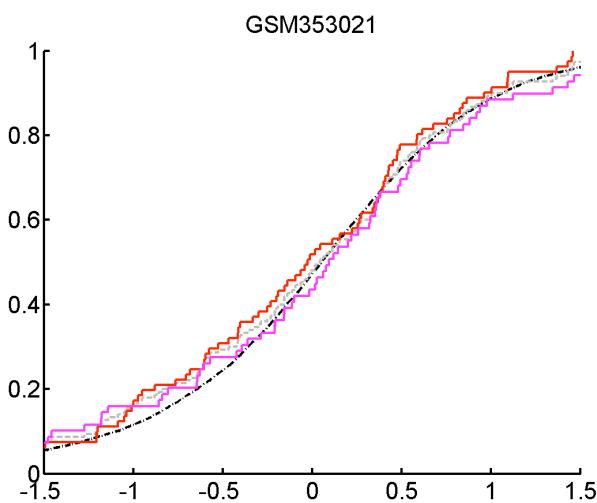
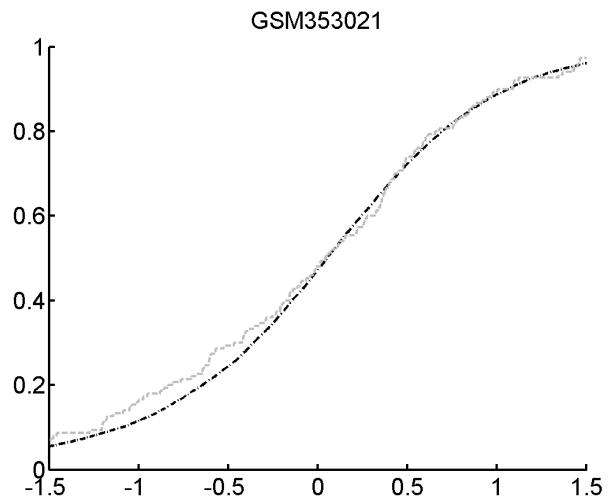
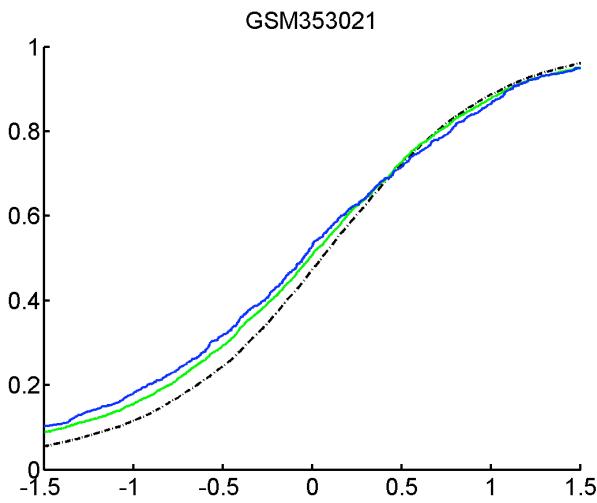
mi/siRNA: pooled





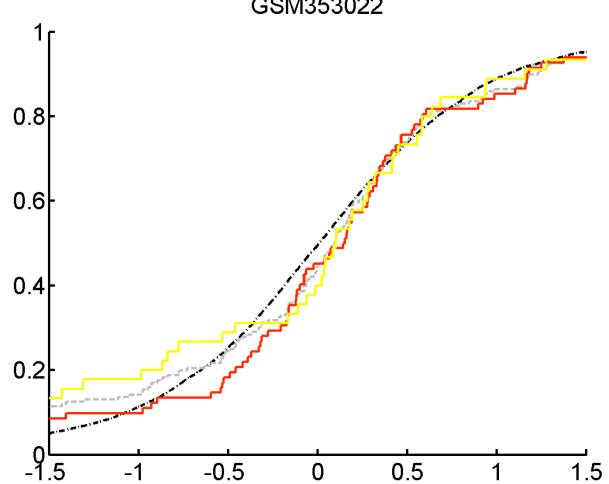
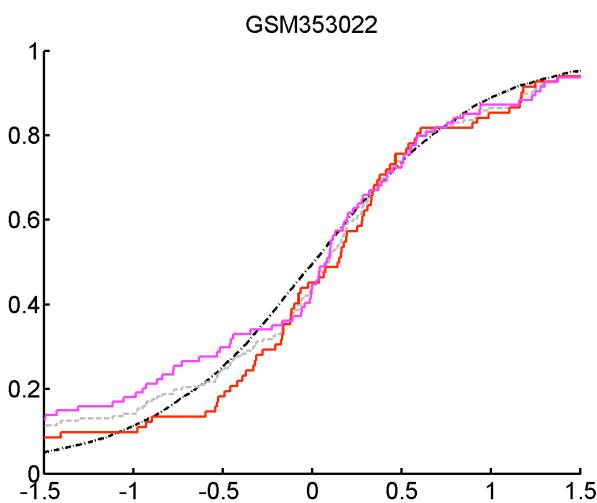
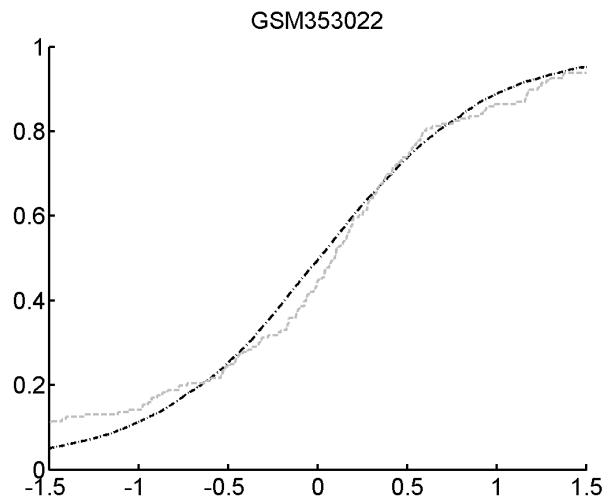
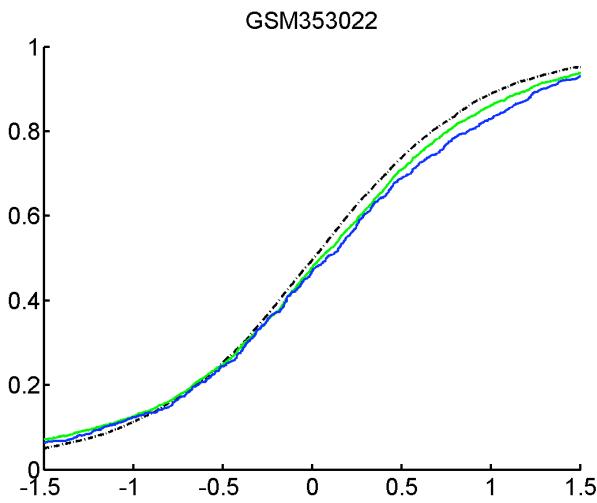
Experiment: GSM353021

mi/siRNA: APOB-Hs2-48h



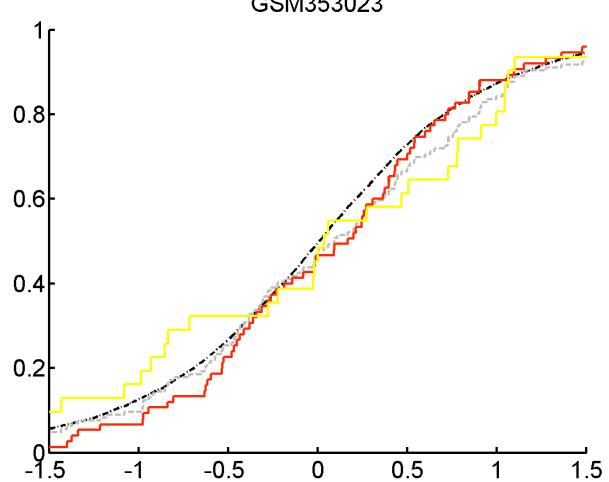
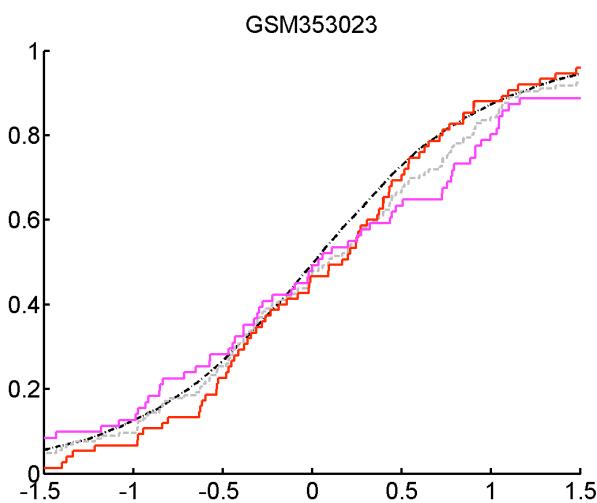
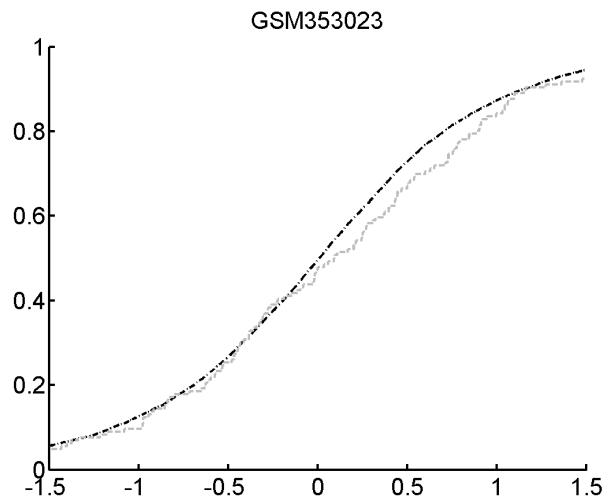
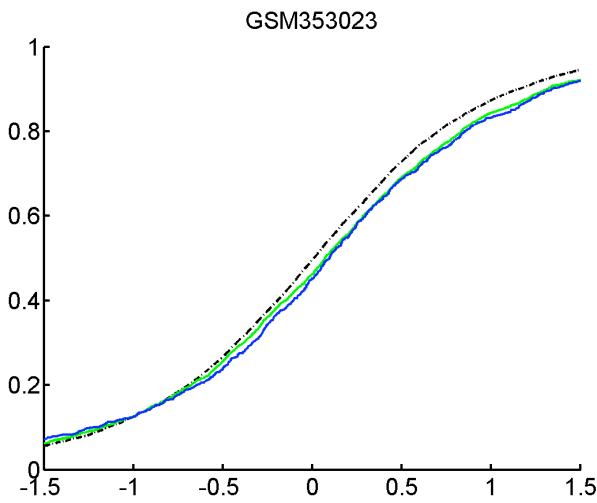
Experiment: GSM353022

mi/siRNA: APOB-Hs3-48h



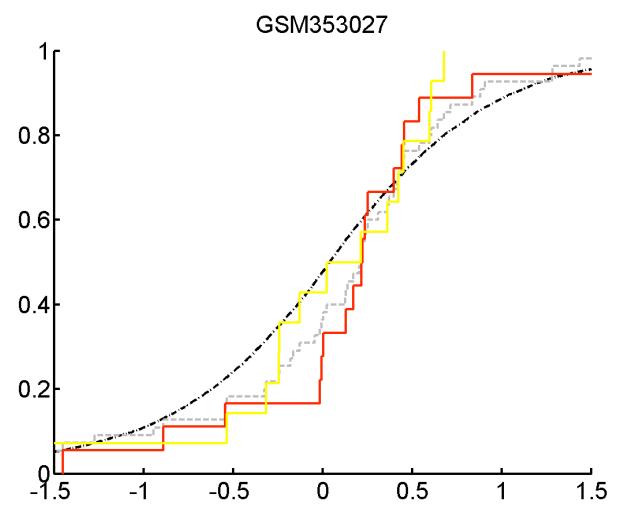
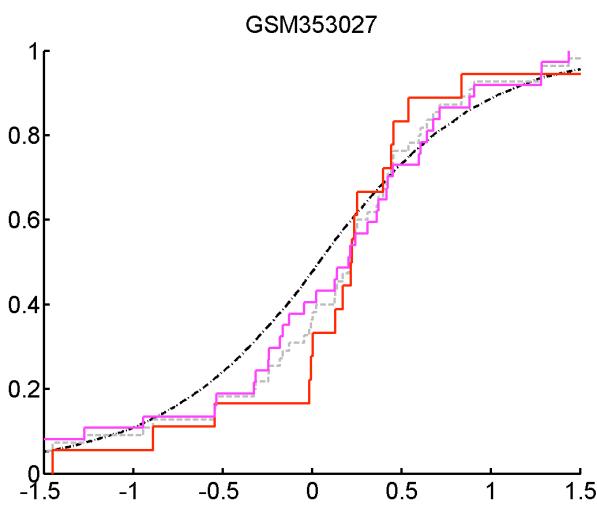
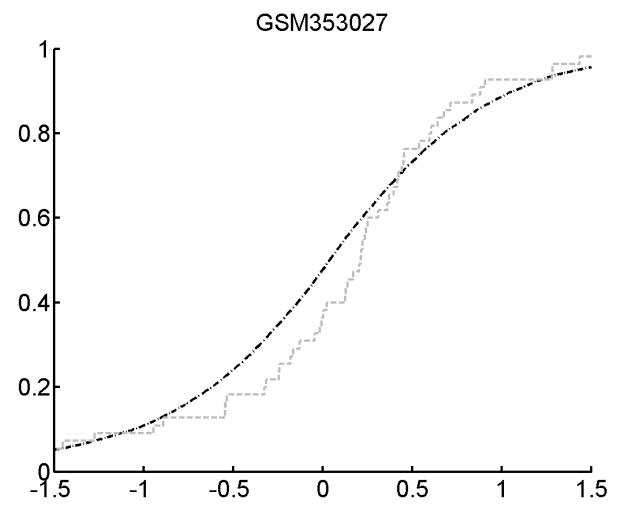
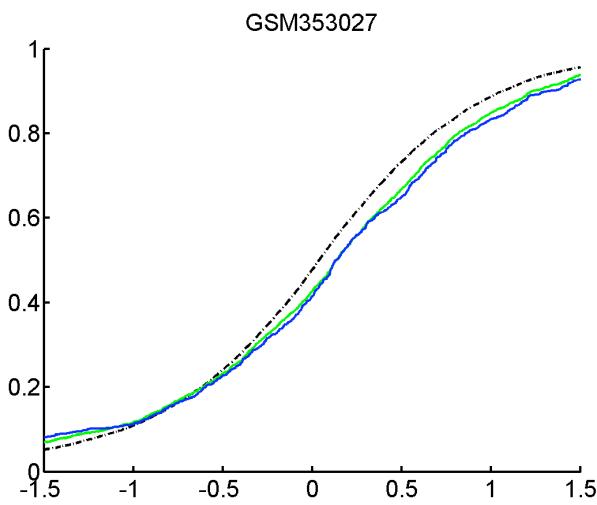
Experiment: GSM353023

mi/siRNA: APOB-Hs4-48h



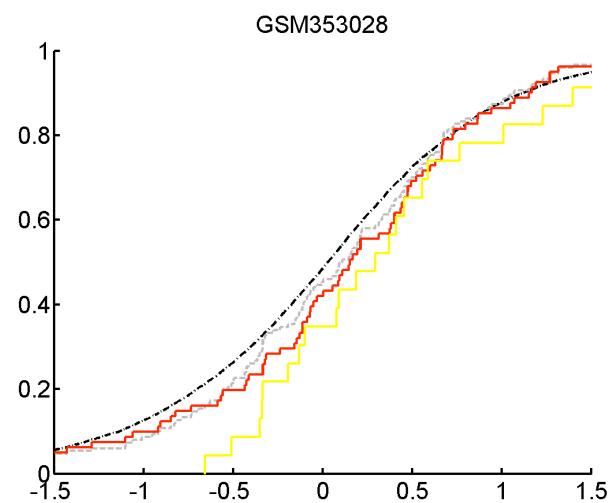
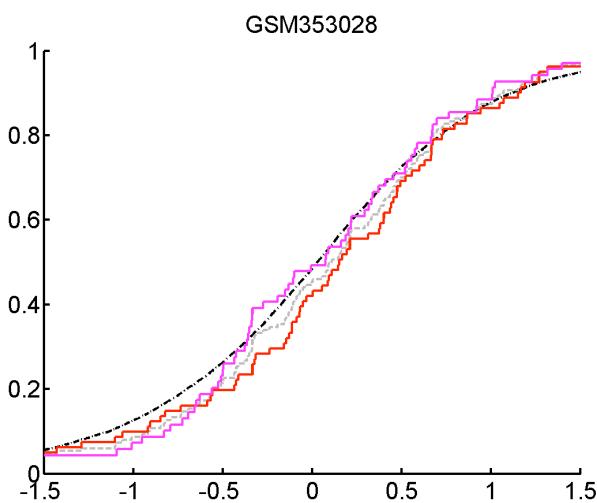
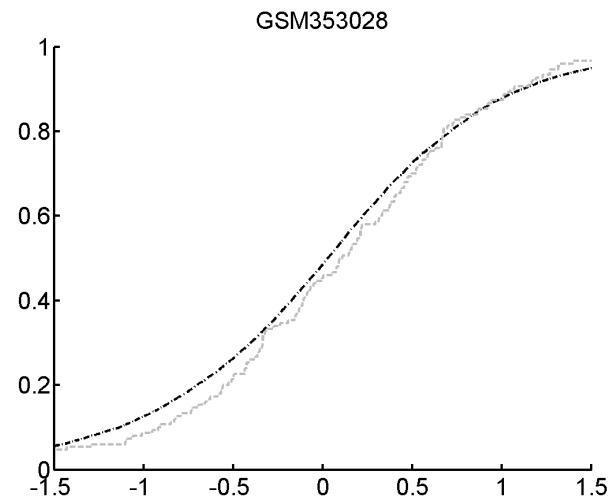
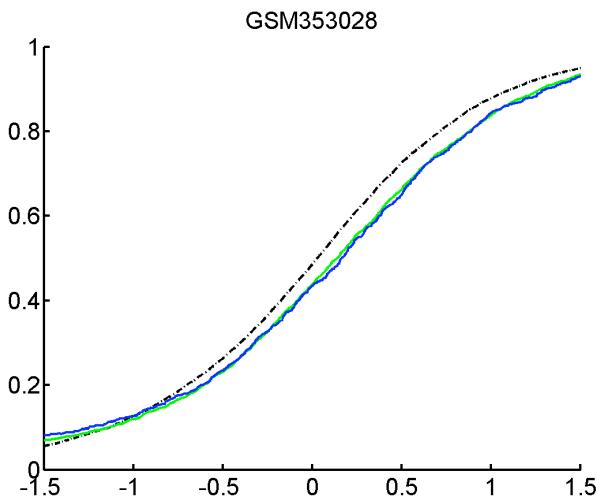
Experiment: GSM353027

mi/siRNA: APOB-Hs1-24h

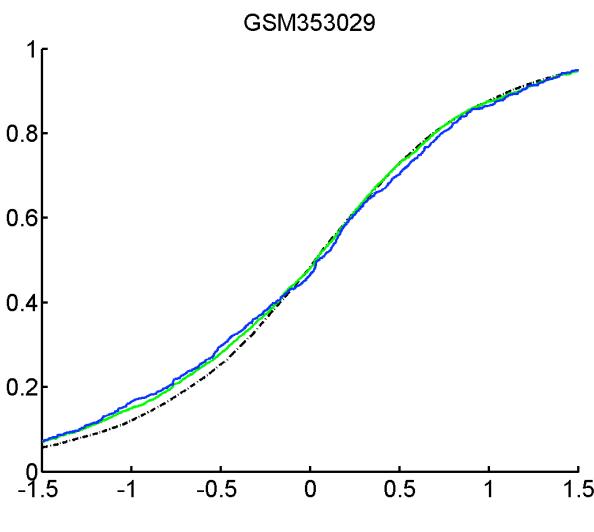


Experiment: GSM353028

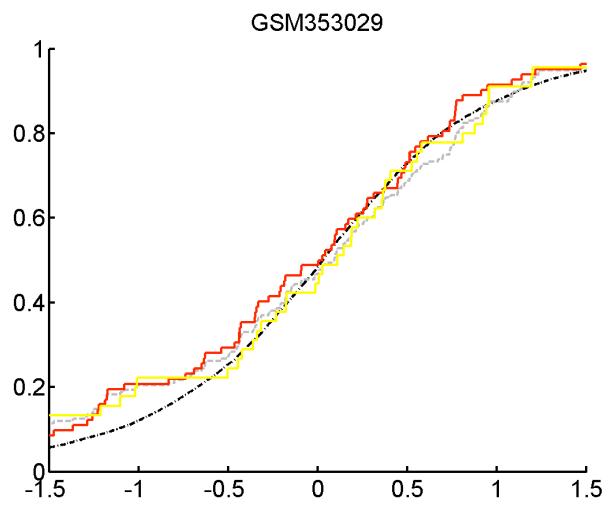
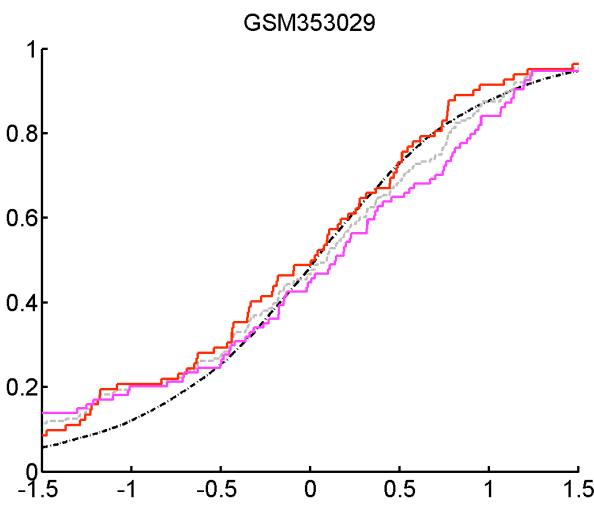
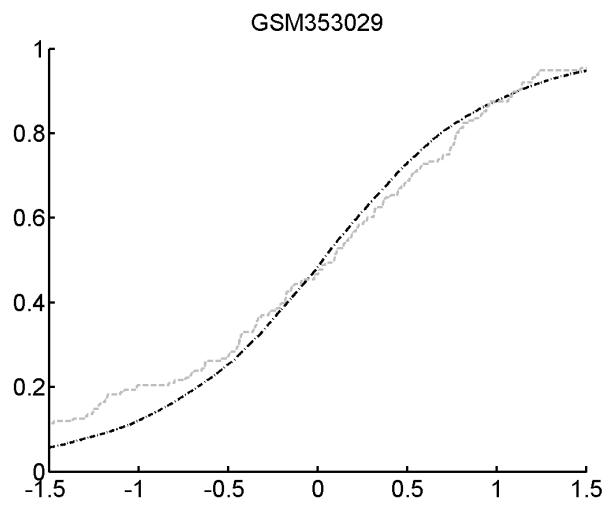
mi/siRNA: APOB-Hs2-24h



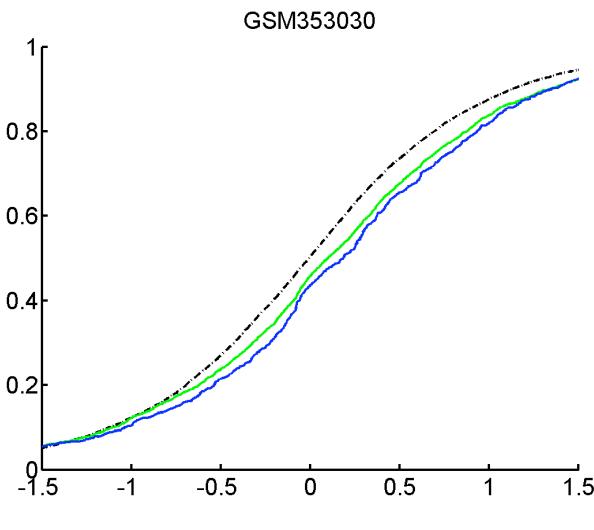
Experiment: GSM353029



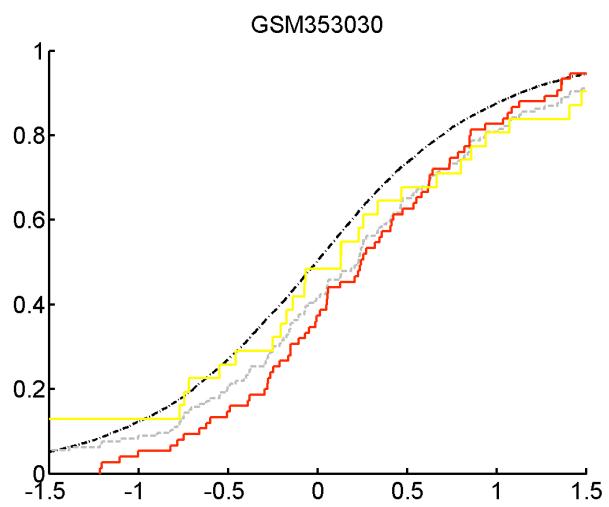
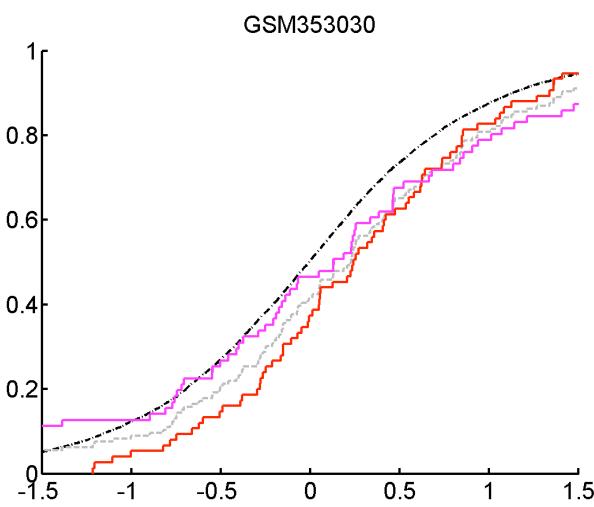
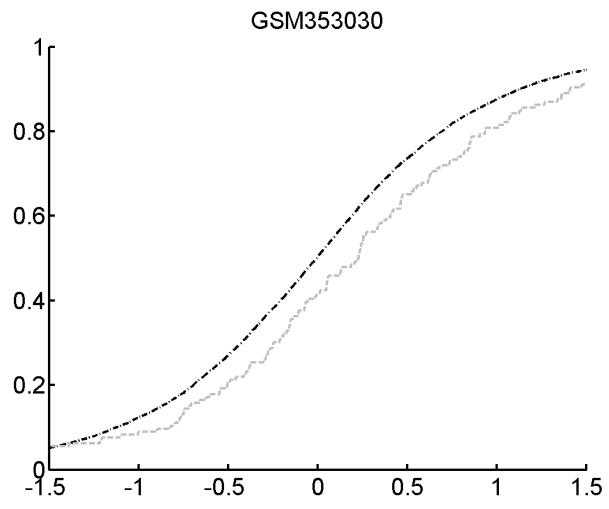
mi/siRNA: APOB-Hs3-24h



Experiment: GSM353030

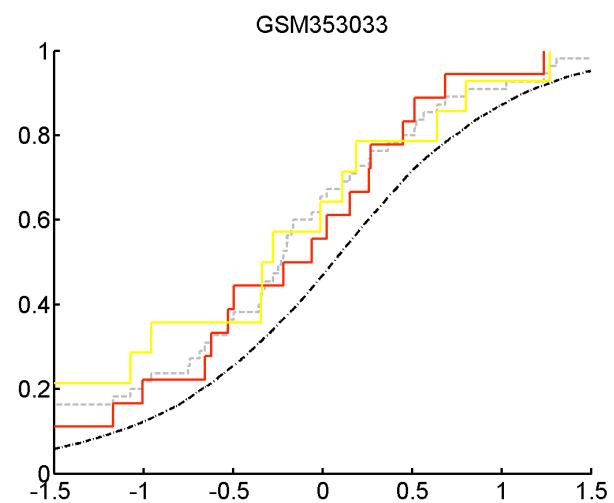
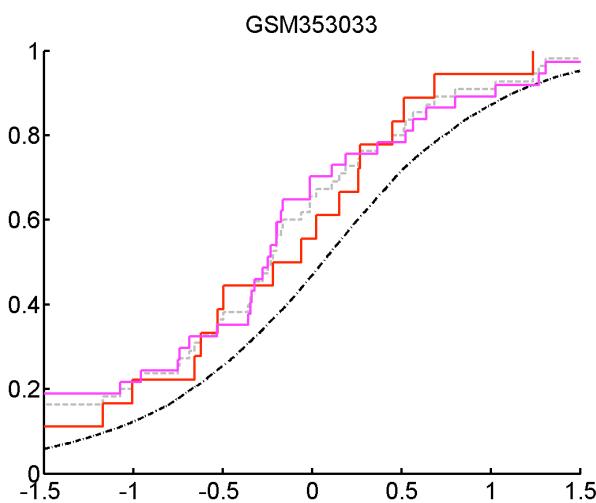
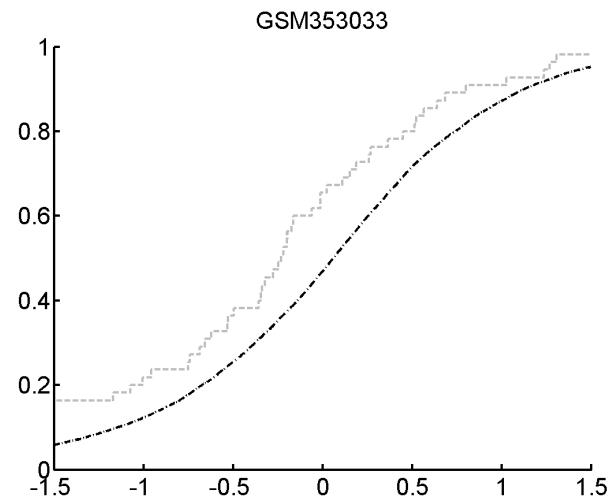
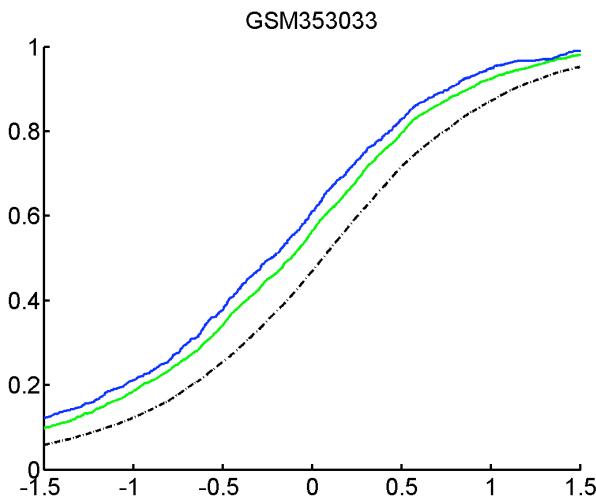


mi/siRNA: APOB-Hs4-24h



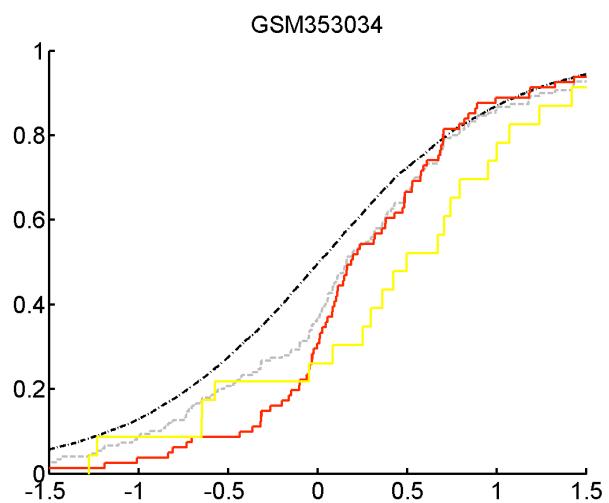
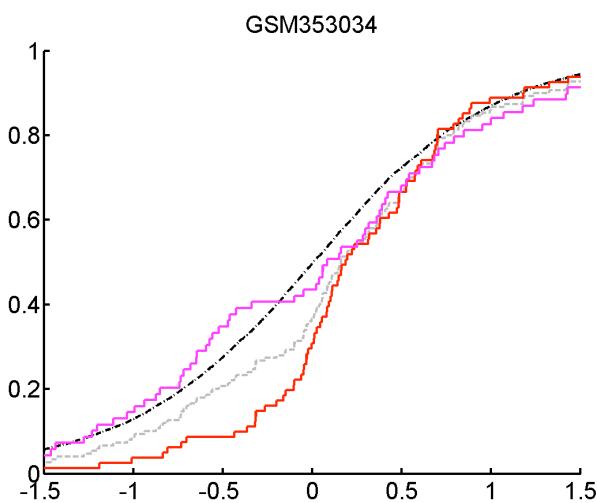
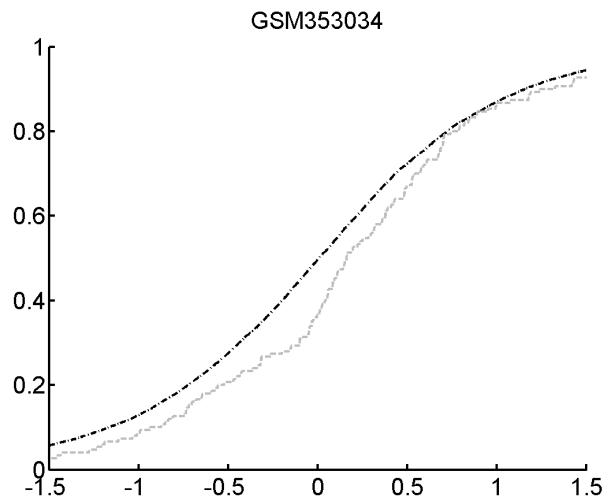
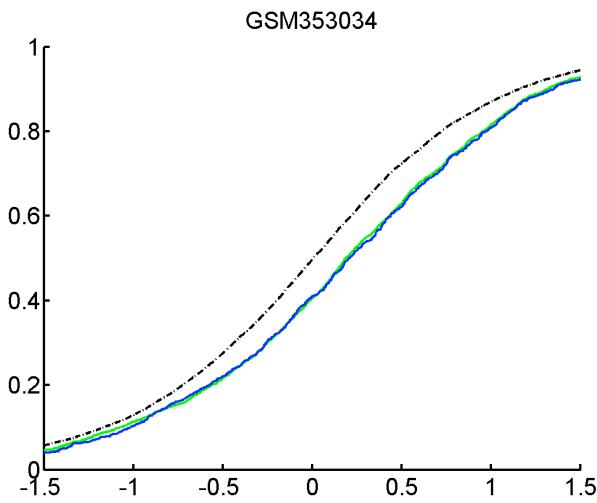
Experiment: GSM353033

mi/siRNA: APOB-Hs1-12h

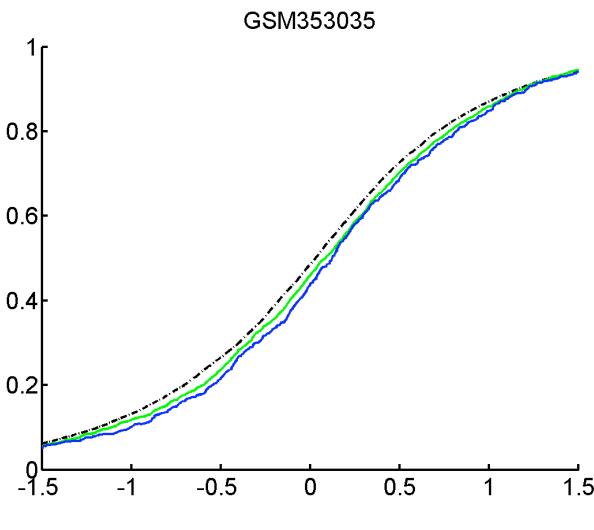


Experiment: GSM353034

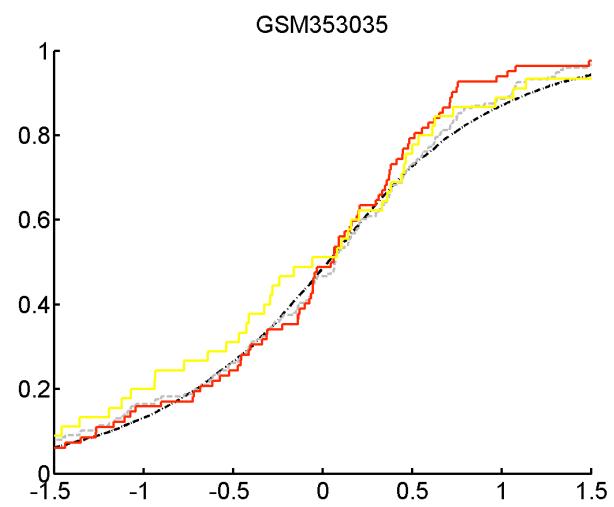
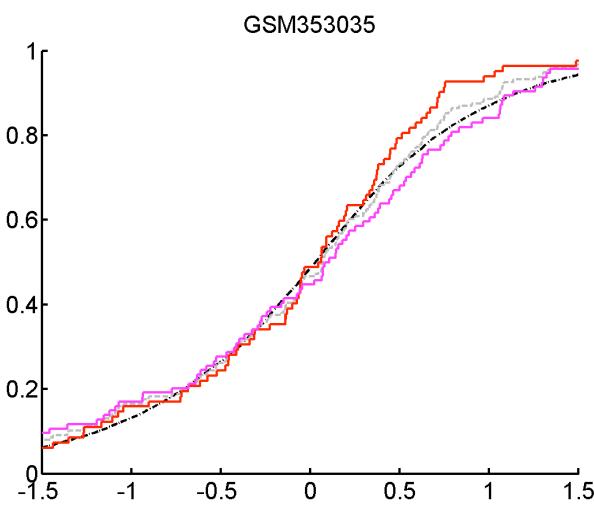
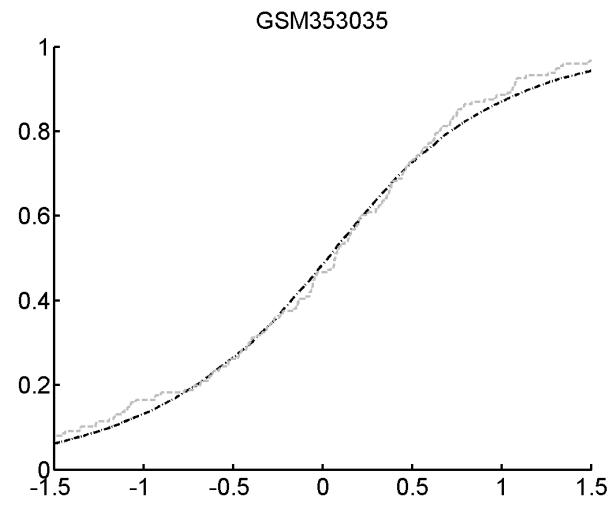
mi/siRNA: APOB-Hs2-12h



Experiment: GSM353035

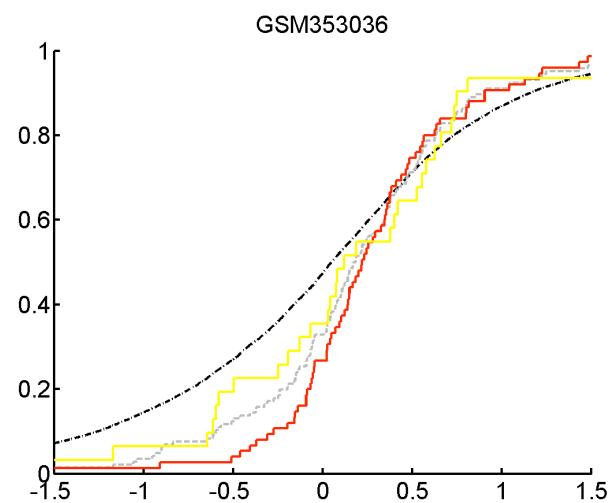
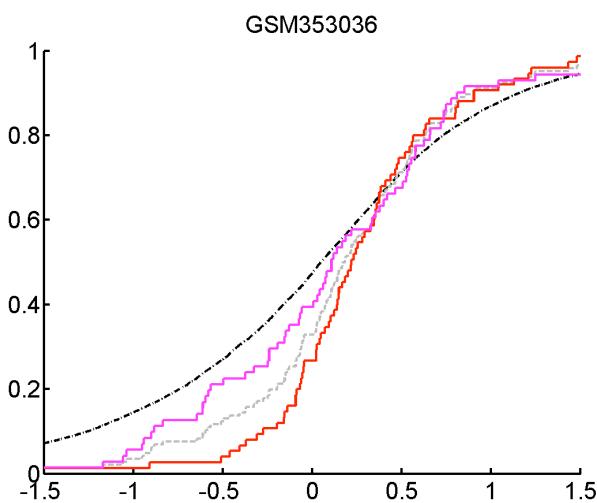
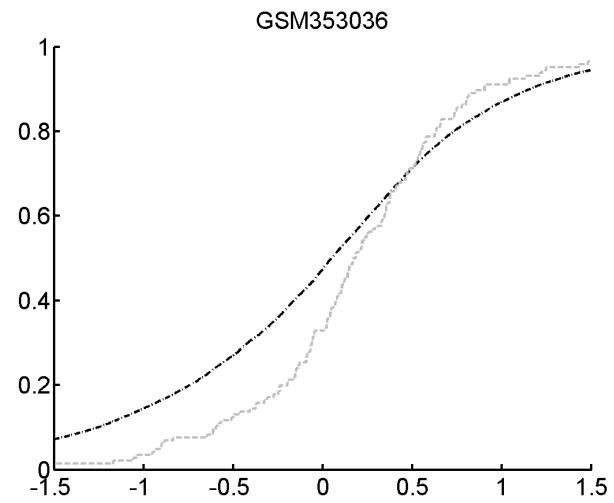
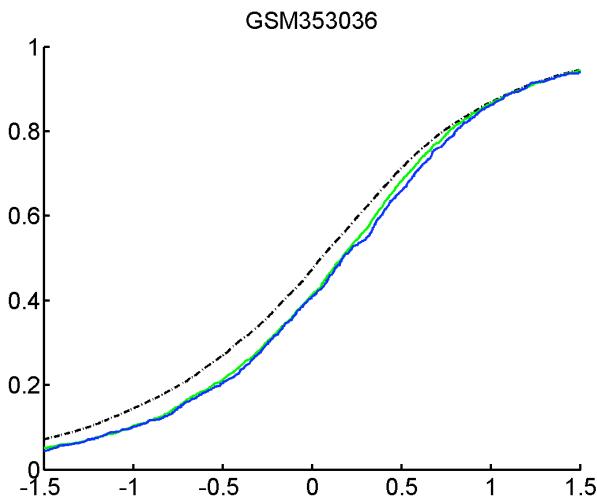


mi/siRNA: APOB-Hs3-12h



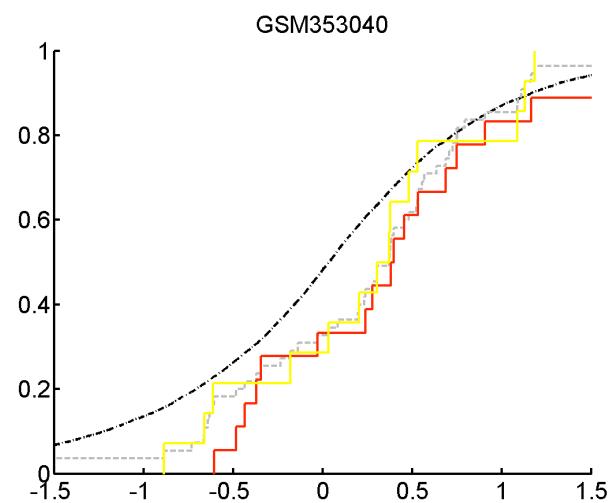
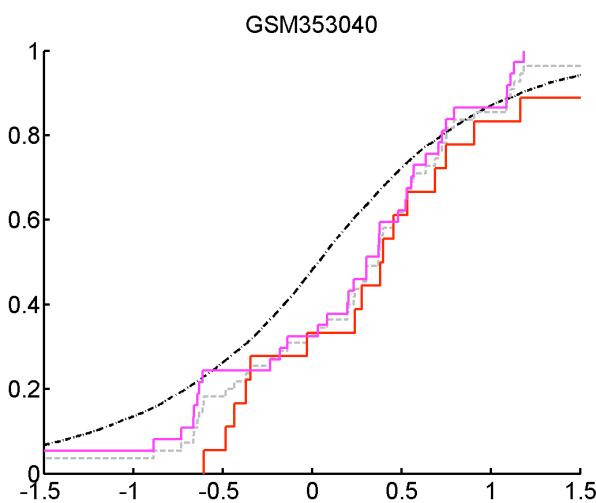
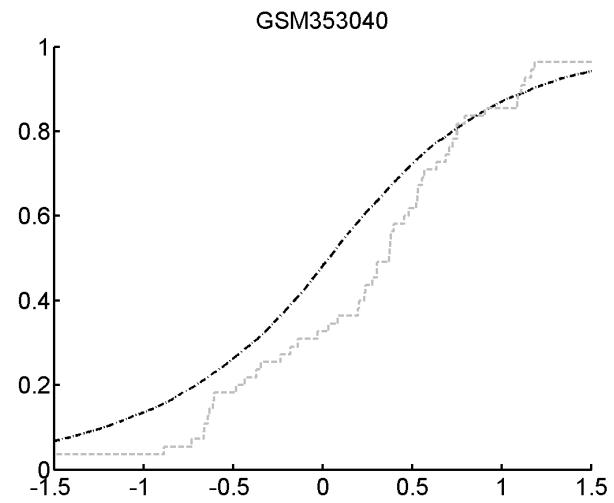
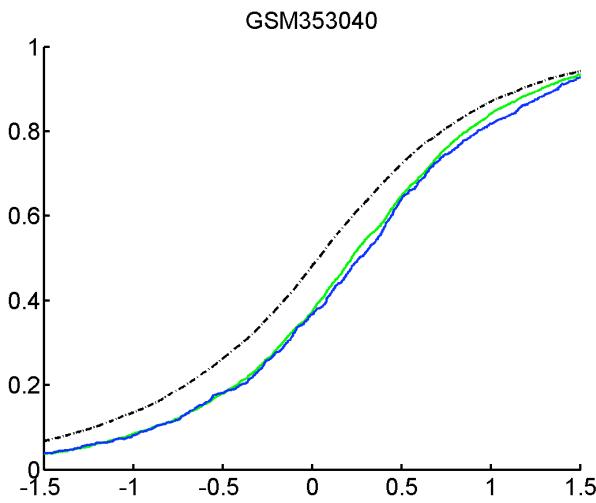
Experiment: GSM353036

mi/siRNA: APOB-Hs4-12h



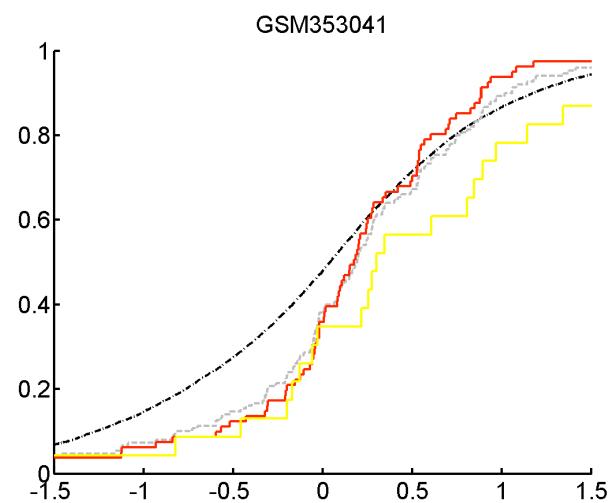
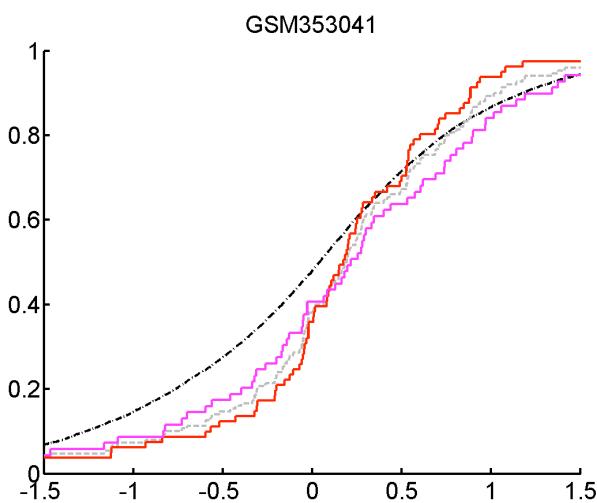
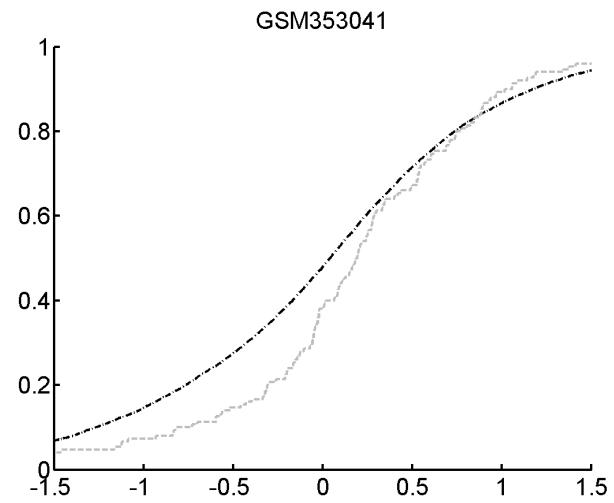
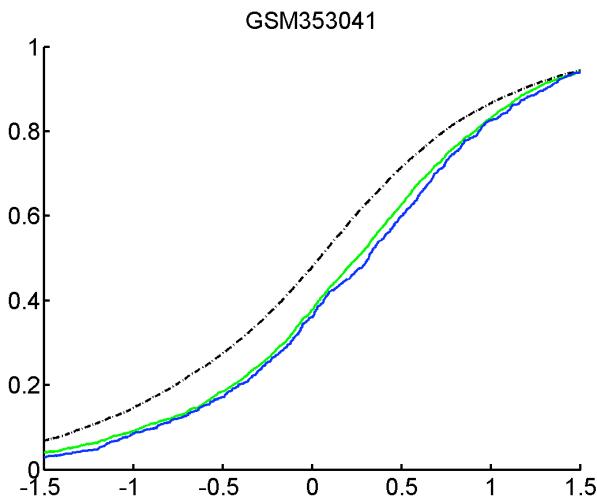
Experiment: GSM353040

mi/siRNA: APOB-Hs1-6h



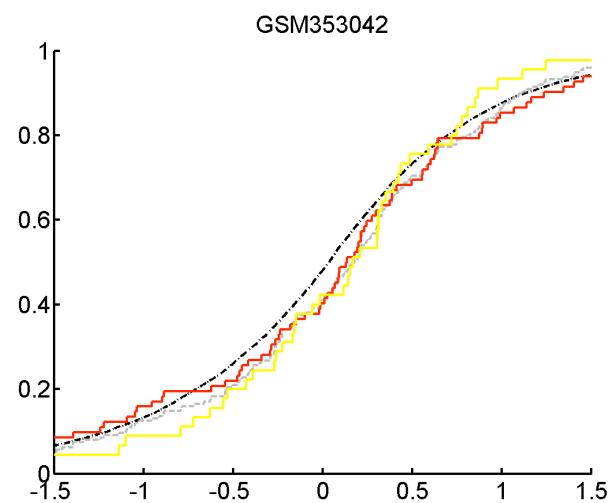
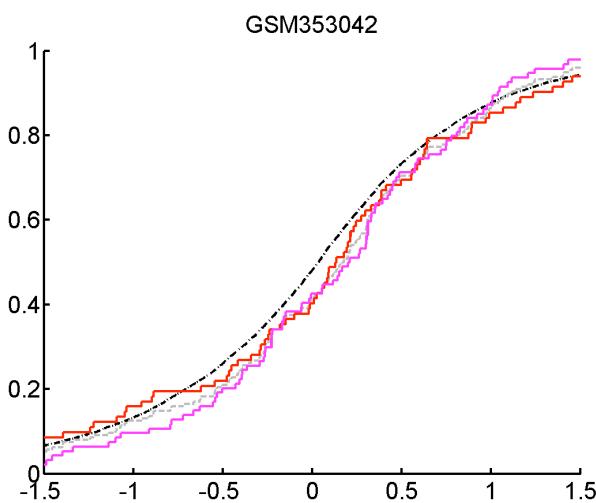
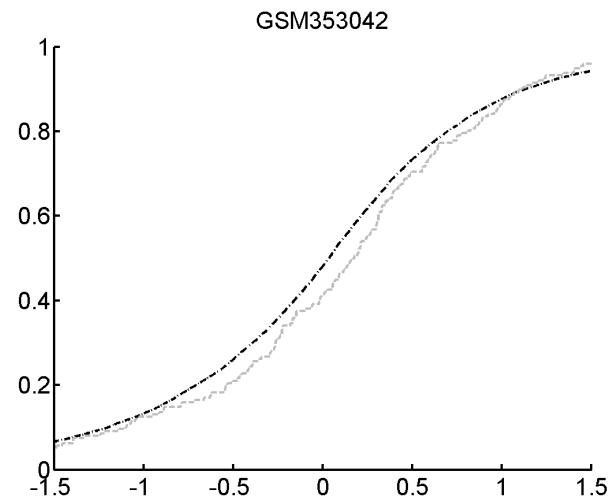
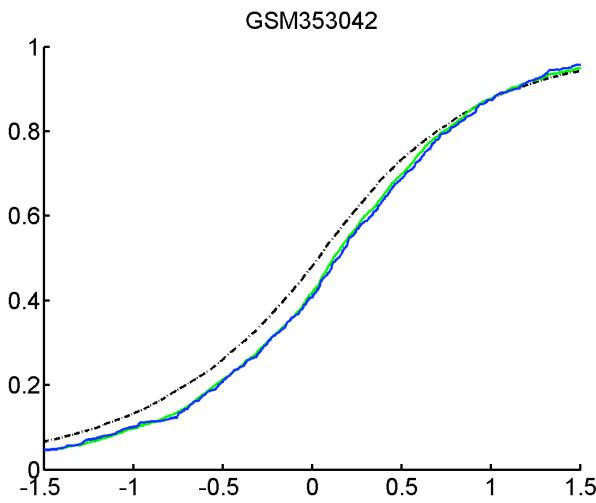
Experiment: GSM353041

mi/siRNA: APOB-Hs2-6h



Experiment: GSM353042

mi/siRNA: APOB-Hs3-6h



Experiment: GSM353043

mi/siRNA: APOB-Hs4-6h

